

ANCHORAGE, ALASKA
AO No. 2026-33, As Amended

1 **AN ORDINANCE REPEALING ANCHORAGE MUNICIPAL CODE CHAPTER**
2 **10.75 INSPECTION FEES; REPEALING AND REENACTING ANCHORAGE**
3 **MUNICIPAL CODE CHAPTERS 23.05 BUILDING REGULATIONS, 23.10**
4 **ANCHORAGE ADMINISTRATIVE CODE, 23.15 INTERNATIONAL BUILDING**
5 **CODE, 23.20 INTERNATIONAL MECHANICAL CODE, 23.25 UNIFORM**
6 **PLUMBING CODE, 23.30 NATIONAL ELECTRICAL CODE, 23.45**
7 **INTERNATIONAL FIRE CODE, 23.60 INTERNATIONAL ENERGY**
8 **CONSERVATION CODE, 23.65 INTERNATIONAL EXISTING BUILDING CODE,**
9 **23.75 ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS,**
10 **23.76 ASME A18.1 SAFETY STANDARD FOR PLATFORM LIFTS AND**
11 **STAIRWAY CHAIRLIFTS, 23.85 INTERNATIONAL RESIDENTIAL CODE, and**
12 **23.110 INTERNATIONAL FUEL GAS CODE.**

13
14 **WHEREAS**, the Development Services Department periodically reviews the
15 sections of the Anchorage Municipal Code (AMC) that it administers and enforces
16 and proposes code changes to the Assembly to keep up with evolving technology,
17 needs of the community, or changing industry standards, and
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19 **WHEREAS**, Title 23 adopts several national codes which develop updates
20 periodically, and
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22 **WHEREAS**, the proposed amendments to these national standards were created
23 through meetings with stake holders from the public consisting of contractors,
24 developers, design professionals, and members of the Anchorage Building Board
25 of Examiners and Appeals, and
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27 **WHEREAS**, the Anchorage Building Board of Examiners and Appeals recommends
28 adoption,
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30 **WHEREAS**, Anchorage Municipal Code Chapter 10.75 has been moved into
31 Chapter 23.45 along with these amendments, now, therefore,
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33 **THE ANCHORAGE ASSEMBLY ORDAINS:**
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35 **Section 1.** Anchorage Municipal Code Chapter 10.75 is hereby repealed in its
36 entirety.
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38 **Section 2.** Anchorage Municipal Code Chapter 23.05 is hereby repealed in its

entirety and replaced with the following:

Chapter 23.05 BUILDING REGULATIONS

23.05.010 Adoption of codes.

The Municipality of Anchorage, pursuant to Charter Section 10.04, adopts and incorporates by reference with local amendment or in full as written the following codes of technical regulation.

Chapter	Title	Edition	By Reference or In Full
23.05	Building Regulations		In Full
23.10	Anchorage Administrative Code		In Full
23.15	International Building Code, including Appendix A, C, and H	2024	By Reference
23.20	International Mechanical Code	2024	By Reference
23.25	Uniform Plumbing Code, including Appendix A, B, C (excluding C601), D, E201, E501 through E506, and I.	2024	By Reference
23.30	National Electrical Code	2023	By Reference
23.45	International Fire Code, including appendices B, C, D, F, I, and N.	2024	By Reference
23.60	International Energy Conservation Code	2024	By Reference
23.65	International Existing Building Code	2024	By Reference
23.70	Abatement of Dangerous Buildings Code		In Full
23.75	American Society of Mechanical Engineers ASME A17.1, Safety Code for Elevators and Escalators	2019	By Reference
23.76	American Society of Mechanical Engineers ASME A18.1, Safety Standard for Platform Lifts and Stairway Chairlifts	2020	By Reference
23.85	International Residential Code, including appendices BA, BB, and BG.	2024	By Reference
23.95	Relocatable Ancillary Buildings	1997	By Reference
23.100	Mobile Aircraft Shelters	1997	By Reference
23.105	Grading, Excavation, Fill, and Landscaping		In Full
23.110	International Fuel Gas Code, including appendix A.	2024	By Reference

23.05.015 Codes Adopted By Reference with Local Amendments

The amendments to the adopted reference codes are listed by section. The first digits identify the title and chapter followed by the article, section and subsection of the adopted code to which the amendment refers, i.e., 23.30.210.23(D) refers to article 210, section 23 and subsection (D) of the National Electrical Code (AMC23.30). The edition of the opted reference codes and amendments are listed in the table under 23.05.010.

23.05.020 Copies on file.

At least one copy of each code of technical regulation adopted by reference in section 23.05.010 shall be kept in the office of the municipal clerk.

23.05.030 Applicability to service areas.

Except as otherwise expressly provided, all provisions of title 23 shall apply throughout the municipality, with the exception that the requirements to apply for and complete the building permit, plan review, and building inspection processes shall be optional in areas outside the Anchorage Building Safety Service Area (ABSSA). The ABSSA is defined in AMC 27.30.040. The boundaries of the ABSSA are outlined on a map located in AMC 27.30.700. If any portion of a property is located within the ABSSA, the property shall be considered in the ABSSA and the requirements of this title apply.

Section 3. Anchorage Municipal Code Chapter 23.10 is hereby repealed in its entirety and replaced with the following:

Chapter 23.10 ANCHORAGE ADMINISTRATIVE CODE

Section 101 General.

23.10.101.1 Title.

These regulations shall be known as the Anchorage Administrative Code, may be cited as such and referred to herein as "this code."

23.10.101.2 Scope of this code.

The provisions of this code shall apply to the construction, alteration, movement, 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. It shall also serve as the administrative, organizational and enforcement rules and regulations for the technical codes related to all work types listed above within the Municipality.

Exception: This code does not apply to marine structures such as wharves and piers; however, the provisions of this code apply to buildings constructed on wharves and piers.

23.10.101.3 Use of building safety services revenue.

All revenues received by the Municipality for building safety services within the scope of this title described in this section shall be expended only for services provided under, and administration and enforcement of, this title.

23.10.101.4 Intent.

The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment.

23.10.101.5 Other laws.

The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

23.10.101.6 Referenced codes.

Title 23 adopts numerous codes. Throughout the International Codes and other codes as adopted in Title 23, there are references to other codes. In all places where the International Codes make reference to the International Plumbing Code, it shall mean the Uniform Plumbing Code as adopted by the Municipality. In all places where the International Codes and other codes refer to the Electrical, Elevator, Property Maintenance, Sign, or Security codes, it shall mean those codes as adopted by the Municipality.

23.10.101.7 Conflicting provisions.

The following shall resolve all conflicting provisions of this code:

- A. When conflicting provisions or requirements occur between this code, the technical codes, reference standards and other codes or laws, the most restrictive shall govern.
- B. When conflicts occur between the technical codes, those provisions providing the greater safety to life shall govern. In other conflicts where sanitation, life safety or fire safety are not involved, the most restrictive provision shall govern.
- C. Where, in a specific case, different sections of the technical codes specify different materials, methods of construction or other requirements, the most restrictive shall govern. When there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
- D. When conflicts occur between specific provisions of this code, those provisions becoming the law most recently shall prevail.

23.10.101.8 Application to existing buildings and building service equipment.

Buildings, structures and the building service equipment to which additions, alterations or repairs are made shall comply with all the requirements of the technical codes for new facilities, except as specifically provided in this section or the International Existing Buildings Code.

23.10.101.9 Relocated or moved buildings.

23.10.101.9.1 Buildings moved into the Municipality.

Buildings or structures moved into the Anchorage Building Safety Service area shall comply with the provisions of this code for new buildings and structures.

23.10.101.9.2 Buildings moved within the Municipality.

Buildings and structures moved within the Anchorage Building Safety Service Area shall comply with the provisions of this code for new or existing buildings and structures and shall have a code compliance inspection by the Municipality for fire and life safety evaluation prior to the move. The burden of proof to demonstrate compliance with the code rests with the applicant. The Building Official may require supplemental information, including but not limited to as-built drawings and engineers' reports, prior to issuing a permit for the move.

Exception: One- and two-family dwellings not over two stories in height, moved within the Anchorage Building Safety Service Area and not changed from the existing as-built condition, do not require lateral analysis or lateral upgrades.

Section 102 Definitions.

23.10.102.1 Definitions.

For the purpose of this code, certain terms, phrases, words and derivatives shall be construed as specified in this section. Where terms are not defined, the definition shall be in accordance with the International Codes, National Electrical Code and the Uniform Plumbing Code adopted by the MOA.

Terms not found in adopted codes shall be the ordinary accepted meanings within the context in which the term is used in Webster's Dictionary, and shall be considered as providing ordinarily accepted meanings. Words used in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine and the feminine the masculine.

Addition is an extension or increase in floor area, number of stories or height of a building or structure.

Alter or alteration is a change or modification in construction or building service equipment.

Approved, as to materials, types of construction, equipment and systems, refers to approval by the Building Official as the result of investigation and

tests conducted by the Building Official, or by reason of accepted principles or tests by recognized authorities, technical or scientific organizations.

Approved agency is an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when the agency has been approved by the Building Official.

Authorized agent is a person designated by an owner or contractor in writing to interact on their behalf with the Municipality during the course of the building permit application, plan review and inspection process. An authorized agent may secure permits in the name of the owner, advise the owner on the purchasing of equipment, materials and labor, and advise the owner on the coordination, scheduling and administration of work. An authorized agent may not coordinate, schedule, or administer work, pay for labor, equipment or materials, engage in contractual relationships with or supervise subcontractors, or hire or supervise employees.

Building is a structure used or intended for supporting or sheltering a use or occupancy.

Building Code is the International Building Code, as adopted by the Municipality.

Building official is the officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

Building permit is a general permit to perform work regulated by title 23, excluding electrical, mechanical, and plumbing work. Electrical, mechanical, and plumbing work is performed under either a trade permit or retrofit permit, further defined elsewhere in this section.

Building service equipment refers to the plumbing, mechanical, electrical and elevator equipment including piping, ductwork, wiring, fixtures and other accessories providing sanitation, lighting, heating, ventilation, cooling, refrigeration, firefighting and transportation facilities essential to the occupancy of the building or structure for its designated use.

Change order refers to the documentation required to support a design change that is significant enough to warrant approval by the plan reviewer prior to commencement of work involving the change.

Commercial Construction is construction of a structure of a non-residential nature, or a residential structure comprised of 4 or more contiguous dwelling units.

Contractor means a person who, in the pursuit of an independent business, undertakes or offers to perform, or claims to have the capacity to perform, or submits a bid for a project to construct, alter, repair, move or demolish a building, highway, road, railroad, or any type of fixed structure, including excavation and site development and the erection of scaffolding, electric signs, marquees, or other similar structures for which a condition, rule, regulation, or standard is prescribed by this code. This term includes general contractor, builder, mechanical contractor, specialty contractor and subcontractors. This term does not include regular employees of a contractor licensed under this code or a person who, as owner of a building or structure, performs work on the building or structure for the owner's use and benefit that would otherwise subject the owner to the licensing requirement of this section.

Dangerous Building Code is the Abatement of Dangerous Building Code, as adopted by the Municipality and referenced in AMC 23.70.

Electrical Code is the National Electrical Code (NFPA 70), as adopted by the Municipality.

Electrical contractor means a contractor licensed by the state and Municipality as an electrical contractor who installs electrical wiring and equipment in industrial, commercial or residential categories. An electrical contractor, unless specifically exempted in AS 08.40.190, must be registered as, or employ, an electrical administrator licensed under AS 08.40, and may only submit bids for, or work on, projects for which it has a licensed electrical administrator.

Electrical journeyman is a person who installs electrical systems subject to the standards of the adopted electrical codes. An electrical journeyman shall possess a Journeyman Electrician Certificate of Fitness issued by the State of Alaska when performing electrical work and shall be employed by an electrical contractor licensed in the Municipality. A journeyman electrician may perform electrical work in all occupancies and supervise up to two trainees.

Electrical residential wireman is a person who installs residential wiring subject to the standards of the adopted electrical codes. An electrical residential wireman shall possess a residential wireman certificate of fitness

issued by the State of Alaska and shall be employed by an electrical contractor licensed in the Municipality. A residential wireman is limited to residential buildings having no more than four dwelling units on a common foundation and may supervise up to two trainees.

Electrical trainee is a person possessing an Electrician Trainee Certificate of Fitness issued by the State of Alaska and employed by an electrical contractor to learn the electrical trade. Trainees may work only when under the direct supervision of a journeyman or wireman, and no more than two trainees may be assigned to a journeyman or wireman.

Elevator Code is the American National Standards Institute/American Society of Mechanical Engineers ANSI/ASME A17.1 Safety Code for Elevators and Escalators as adopted by the Municipality.

Existing Building is a building erected prior to the date of adoption of this code, or one for which a legal certificate of occupancy has been issued.

Existing Building Code is the International Existing Building Code, as adopted by the Municipality.

Field change order refers to the documentation required to support a minor field change to the approved plans. Field change orders may be reviewed by the inspector or plan reviewer, concurrent with or subsequent to, the commencement of work involving the change.

Fire Code is the International Fire Code, as adopted by the Municipality.

Fuel Gas Code is the International Fuel Gas Code, as adopted by the Municipality.

Gas fitter, journeyman is a person issued a certificate of qualification by the Municipality to install, repair and maintain gas piping and gas-fired equipment regulated by the adopted plumbing and fuel gas codes as an employee of a licensed gas piping, plumbing or sheet metal contractor. A journeyman gas fitter shall hold a State of Alaska certificate of fitness card.

Gas piping contractor means a contractor whose business operations consist of the repair and installation of gas piping and equipment regulated by the adopted plumbing and fuel gas codes. A gas piping contractor is required to be licensed by the state as a mechanical contractor, licensed by the Municipality as a gas piping contractor and must possess a certificate of qualification issued by the Municipality. A gas piping contractor is required

to be registered as, or employ, a mechanical administrator licensed under AS 08.40, and may only submit bids for, or work on, projects for which it has a licensed mechanical administrator.

General contractor, or builder means a contractor licensed by the state and Municipality whose business operations require the use of more than three trades or the use of mechanical or specialty contractors and subcontractors who are under the supervision of the contractor.

Listed and listing are terms referring to equipment and materials included in a list published by an approved testing laboratory, inspection agency, or other organization concerned with product evaluation and maintaining periodic inspection of current productions of listed equipment or materials. The published list shall state the material or equipment complies with approved nationally recognized codes, standards or tests and has been tested or evaluated and found suitable for use in a specified manner.

Mechanical Code is the International Mechanical Code, as adopted by the Municipality.

Municipality means Municipality of Anchorage.

Occupancy is the purpose for which a building, or part thereof, is used or intended to be used.

Owner is any person, agent, firm or corporation with a legal or ownership interest in the property.

Permit is an official document or certificate issued by the Building Official authorizing performance of a specified activity.

Person is a natural person, heir, executor, administrator or assign, and also includes a firm, partnership or corporation, its or their successor or assign, or agent of any of the aforesaid.

Plumbing Code is the Uniform Plumbing Code, as adopted by the Municipality.

Plumbing contractor means a contractor whose business operations consist of plumbing work regulated by the adopted plumbing code. A plumbing contractor is required to be licensed by the state as a mechanical contractor, licensed by the Municipality as a plumbing contractor and must be issued a certificate of qualification issued by the Municipality. A plumbing

contractor is required to be registered as, or employ, a mechanical administrator licensed under AS 08.40, and may only submit bids for, or work on, projects for which it has a licensed mechanical administrator.

Plumber journeyman is a person issued a certificate of qualification by the Municipality to labor at the trade of plumbing as an employee of a licensed plumbing contractor installing and repairing plumbing and gas piping systems and equipment. A journeyman plumber shall hold a State of Alaska certificate of fitness card.

Plumber trainee is a person, other than a contractor or journeyman, who labors at the trade of plumbing as an employee of a licensed plumbing contractor. The trainee shall be under the direct supervision and in the immediate presence of a plumbing contractor or journeyman. The trainee shall hold a State of Alaska certificate of fitness card and a Municipality of Anchorage certificate of qualification trainee card.

Repair is the reconstruction or renewal of any part of an existing building, structure or building service equipment for the purpose of its maintenance.

Residential construction, for the purposes of issuance of a residential permit, means construction associated with a building having no more than three dwelling units and having no other uses or occupancies other than a private garage or carport.

Residential electrical contractor means a contractor licensed by the state and Municipality as an electrical contractor who installs electrical wiring and equipment in residential buildings having up to four dwelling units on a single foundation.

Retrofit permit is an official document or certificate issued by the Building Official for limited electrical, plumbing, mechanical or fire system work regulated by this code.

Shall means mandatory.

Sheet metal contractor means a contractor whose business operations consist of the repair and installation of heating, ventilation and air-conditioning equipment, systems and ductwork regulated by the adopted mechanical code. A sheet metal contractor is required to be licensed by the state as a mechanical contractor, licensed by the Municipality as a sheet metal contractor and issued a certificate of qualification by the Municipality. A sheetmetal contractor is required to be registered as, or employ, a

mechanical administrator licensed under AS 08.40, and may only submit bids for, or work on, projects for which it has a licensed mechanical administrator.

Sheet metal journeyman is a certificate of qualification holder who labors at the trade of sheet metal as an employee of a licensed sheet metal contractor. A sheet metal journeyman may install and repair mechanical equipment, i.e., HVAC equipment, duct work, and venting of appliances.

Sheet metal trainee is person, other than a contractor or journeyman, who labors at the trade of sheet metal as an employee of a licensed sheet metal contractor. The trainee shall be under the direct supervision and in the immediate presence of a sheet metal contractor or journeyman. The trainee shall hold a certificate of qualification trainee card issued by the Municipality.

Specialty contractor means a contractor licensed by the State of Alaska to perform a specialty trade. Specialty contractors performing work regulated by this code are required to be licensed by the Municipality.

Structural observation means the visual observation of the structural system, for general conformance to the approved plans and specifications, at significant construction stages and at completion of the structural system. Structural observation does not include or waive the responsibility for the inspections required by this code.

Structure is that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

Technical Codes refer to those codes adopted by the Municipality containing the provisions for design, construction, alteration, addition, repair, removal, demolition, use, location, occupancy and maintenance of buildings and structures and building service equipment as herein defined.

Trade Permit is an official document or certificate issued by the Building Official to permit performance of electrical, mechanical, or plumbing work. Trade permits may require electrical, mechanical, plumbing, structural, fire prevention and land use plan review.

Valuation or value shall be determined in accordance with this code.

Section 103 Organization and Enforcement.

23.10.103.1 Creation of enforcement agency.

There is hereby established a code enforcement agency under the administrative and operational control of the Building Official.

23.10.103.2 General.

Whenever the term or the title "administrative authority," "responsible official," "Building Official," "chief inspector," "code enforcement officer," or similar designation is used herein or in any of the technical codes, it shall mean the Building Official designated by the appointing authority.

23.10.103.3 Powers and duties of the Building Official.

23.10.103.3.1 General.

The Building Official is authorized and directed to enforce the provisions of this code, to render interpretations of this code, and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code and shall not have the effect of waiving requirements specifically provided for in this code.

23.10.103.3.2 Applications and permits.

The Building Official shall receive applications, review construction documents and issue permits for the erection and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits are issued and enforce compliance with the provisions of this code.

23.10.103.3.2.1

The Internal Auditor shall develop a performance measure and customer satisfaction survey mechanism that audits users' experiences with the Development Services Department.

23.10.103.3.3 Notices and orders.

The Building Official shall issue all necessary notices and orders to ensure compliance with this code. The person to whom a notice or order is directed shall have 30 days to appeal to the board of building regulation examiners and appeals, except as provided in Chapter 23.70, limiting the appeal period to 10 days for notices to vacate. If no timely appeal is filed, the notice and order is final and binding and not subject to any further appeal. The Building Official may withdraw a notice or order at any time.

23.10.103.3.4 Inspections.

The Building Official shall make the required inspections, or the Building Official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and

be certified by a responsible officer of such approved agency or the responsible individual. The Building Official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

23.10.103.3.5 Identification (ID badges - Code Abatement).

The Building Official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

23.10.103.3.6 Right of entry.

Where it is necessary to make an inspection to enforce the provisions of this code, or where the Building Official has reasonable cause to believe there exists in a structure or upon a premises a condition contrary to or in violation of this code which makes the structure or premises unsafe, dangerous or hazardous, the Building Official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided if such structure or premises is occupied, credentials shall be presented to the occupant and entry requested. If such structure or premises is unoccupied, the Building Official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the Building Official shall have recourse to the remedies provided by law to secure entry.

23.10.103.3.7 Department records.

The Building Official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

23.10.103.3.8 Liability.

The Building Official, member of the Building Board or employee charged with the enforcement of this code, while acting for the Municipality in good faith and without malice in the discharge of duties required by this code or other pertinent law or ordinance, shall not be liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by the officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the municipal attorney until the final termination of the proceedings. Neither the Building Official nor any subordinate shall be liable for cost in

any action, suit or proceeding instituted in pursuance of the provisions of this code.

23.10.103.3.9 Approved materials and equipment.

Materials, equipment and devices approved by the Building Official shall be constructed and installed in accordance with such approval.

23.10.103.3.9.1 Used materials and equipment.

The use of used materials meeting the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless approved by the Building Official.

23.10.103.3.10 Modifications.

Whenever there are practical difficulties involved in carrying out the provisions of this code, the Building Official has the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the Building Official shall first find a special individual reason making the strict letter of this code impractical, the modification is in compliance with the intent and purpose of this code, and such modification does not lessen health, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the Development Services Department.

23.10.103.3.11 Alternative materials, design, and methods of construction and equipment.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided any such alternative has been approved. An alternative material, design or method of construction shall be approved where the Building Official finds the proposed design is satisfactory and complies with the intent of the provisions of this code, and the material, method or work offered is, for the purpose intended, at least the equivalent prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

23.10.103.3.11.1 Research reports.

Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

23.10.103.3.11.2 Tests.

Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence a material or method does not conform to the

requirements of this code, or in order to substantiate claims for alternative materials or methods, the Building Official is authorized to require tests as evidence of compliance, to be made at no expense to the Municipality. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the Building Official shall approve the testing procedures. Tests shall be performed by an approved agency, and reports of such tests shall be required for retention of public records.

23.10.103.3.12 Cooperation of other officials and officers.

The Building Official may request and shall receive the assistance and cooperation of other officials of the Municipality as required in the discharge of the duties required by this code or other pertinent laws or ordinance.

23.10.103.3.13 Connection of service utilities.

No person shall make connections from a utility, source of energy, fuel or power to any building or system regulated by this code for which a permit is required, until released by the Building Official.

23.10.103.3.14 Temporary connection.

The Building Official has authority to authorize the temporary connection of the building or system to the utility source of energy, fuel, or power.

23.10.103.3.15 Authority to disconnect service utilities.

The Building Official has authority to authorize disconnection of utility service to the building, structure, or system regulated by this code and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall notify the serving utility and, whenever possible, the owner and occupant of the building, structure, or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure, or service system shall be notified in writing as soon as practical thereafter.

23.10.103.3.16 Post-earthquake safety evaluation of buildings.

General: Should the Municipality experience a seismic event causing widespread damage to buildings, the Building Official may conduct the Applied Technology Council ATC-20 Post-Earthquake Safety Evaluation of Buildings process. Where there is reason to believe that a building has sustained structural damage, the Building Official may require the building undergo a detailed structural evaluation performed by a licensed structural engineer.

Volunteer structural engineers: The department shall maintain a list of volunteer licensed structural engineers familiar with the ATC-20 process. When deemed necessary, the Building Official will solicit their assistance to perform ATC-20 rapid and detailed evaluations. The Building Official shall deputize volunteer structural engineers conducting ATC-20 evaluations. All building evaluations shall be submitted to the building department.

23.10.103.4 Power and duties of the Board of Building Regulation Examiners and Appeals.

23.10.103.4.1 General.

To hear and decide appeals of orders, decisions or determinations made by the building or Fire Code Official relative to the application and interpretation of this code, there shall be and is hereby created a board of building regulation examiners and appeals (hereafter "Building Board"). The Building Board may, in its discretion, offer comment or recommendation concerning amendments to this code. The Building Board shall be appointed by the governing body and shall hold office at its pleasure. The Building Board shall follow rules of procedure approved by the Assembly for conducting business. All decisions and findings in an appeal shall be rendered in writing to the appellant, with a duplicate copy to the Building Official.

23.10.103.4.2 Appeal pools and three-member hearing panels.

The Building Board shall establish pools from which three-member hearing panels may be selected. The pools shall be comprised of Building Board members qualified by experience and training to pass upon matters pertaining to the appeal.

- A. Up to five pools shall be established the first meeting of each calendar year.
- B. The secretary to the board and the board chair shall assign members from the most relevant pool to a specific appeal.
- C. At least two members of a three-member hearing panel shall be actively engaged in disciplines, trades, or professions relevant to the appeal.
- D. In the discretion of the Building Board, a decision rendered by a three-member hearing panel may be accepted for de novo review.

23.10.103.4.3 Limitations of authority.

An application for appeal shall be based on a claim that the true intent of this code, or the rules legally adopted hereunder, have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The Building Board, including

three-member hearing panels, shall have no authority to waive requirements of this code.

23.10.103.4.4 Members, voting and hearings before the Building Board.

A. The Building Board, as described in Section 4.40.030, and this title shall consist of no fewer than 11 and up to 15 members appointed by the mayor, subject to confirmation by the Assembly, qualified by experience or training to pass on matters pertaining to building construction, as follows:

1. Two (2) members shall be Architects registered in the State of Alaska.
2. Two (2) members shall be Professional Engineers registered as Civil Engineers in the State of Alaska.
3. One (1) member shall be a Professional Engineer, registered as a Mechanical Engineer in the State of Alaska.
4. One (1) member shall be a Professional Engineer, registered as an Electrical Engineer in the State of Alaska.
5. Two (2) members shall be licensed General Contractors actively engaged in general building construction and at least one of the members shall be actively engaged in home building in the State of Alaska.
6. One (1) member shall be a licensed Electrical Contractor actively engaged in the electrical trade in the State of Alaska.
7. One (1) member shall be a licensed Plumbing Contractor actively engaged in the plumbing trade in the State of Alaska.
8. One (1) member shall be a licensed Mechanical Contractor actively engaged in the mechanical trade in the State of Alaska.
9. Up to four (4) additional members. Additional members shall be qualified by experience or training and actively engaged in any of the above listed disciplines, trades, or professions in the State of Alaska or shall be a registered fire protection engineer, a licensed fire protection contractor, or licensed elevator contractor in the State of Alaska.
10. No more than two (2) of any discipline shall be on the Building Board at the same time.

B. Building board quorum and voting.

1. Quorum. The majority of the appointed members shall constitute a quorum.
2. Voting. Action by the Building Board, including affirmative action on quasi-judicial matters, requires an affirmative vote of the greater of 6 or a majority of members in attendance who are not disqualified by conflict of interest.

C. Three-member hearing panels. A Building Board three-member hearing panel shall hear and decide appeals from decisions of administrative officials and other enforcement orders relating to code regulations under Title 23. Except for appeals filed under section 23.70.706, appeals will be scheduled within 3 to 5 business days of the receipt of application for appeal. A person with the right to appeal has 30 days from the date of the action of an administrative official to file an appeal with the secretary to the Building Board, with the exception noted in section 23.70.706.1, limiting the appeal period to 10 days for notices to vacate, unless a longer time period is stated in writing by the Building Official. If no appeal is filed within these time periods, the action of the administrative official is deemed final and binding and not subject to any further appeal.

D. Three-member hearing panel quorum and voting.

1. Quorum. A quorum for a hearing panel shall be three panel members.
2. Voting. The granting of any appeal or part thereof by a hearing panel shall require the concurring vote of two members of the panel. Any appeal or part thereof which is not granted by the panel shall be considered denied.
3. Reconsideration. Hearing panel decisions shall not be subject to reconsideration but may be appealed under subsection E. of this section.

E. Discretionary de novo re-hearing. In its sole discretion as determined by majority vote of the members in attendance not disqualified from voting by conflict of interest or under this subsection as provided below, the Building Board may accept an appeal decided by a three-member hearing panel, in whole or in part, for de novo re-hearing by the full Building Board.

1. Application for de novo re-hearing by the full board may be made by any party or by any member of the Building Board.
2. Application for de novo re-hearing by the full Building Board must be filed with the secretary to the board within 5 business days from publication of the hearing panel's written decision.
3. Members of the hearing panel shall not participate in the vote on whether the Building Board shall rehear a matter as a full board.
4. If de novo re-hearing is accepted by the Building Board, members of the three-member hearing panel may participate in the re-hearing as members of the full board.

23.10.103.4.5 Secretary to the Building Board.

The Building Official or designee shall be an ex-officio member without vote and shall act as secretary to the Building Board, shall prepare all

correspondence, send out all required notices within 5 business days, keep minutes of all meetings, and maintain a file on each case coming before the Building Board. The secretary will provide timely electronic notice and copies of hearing panel decisions to the full Building Board.

23.10.103.4.6 Hearing packet

A. Appellant hearing packet materials must be turned in ten (10) business days before the hearing to the secretary to the Building Board.

1. Executive Summary shall not exceed five pages.
2. Supporting documentation, such as such as drawings and/or calculations are in addition to the executive summary.
3. If the materials provided are determined onerous to review due to the amount of material provided, the Building Official or Building Board may postpone the hearing to provide adequate time for review.

B. A staff report prepared by the Building Official or designee presenting Building Safety's or Fire Prevention's opinion will be prepared and available to the appellant and Building Board at least five (5) business days prior to the hearing date.

23.10.103.4.6.1 Supplementing the hearing packet.

When the Building Board panel requires data and documents not in the current possession of the Building Official, the secretary to the Building Board shall act timely on the request to ensure the hearing packet is supplemented with the requested information prior to hearing. If the Notice of Appeal relies on, but does not provide, data, documents, or other information, the secretary shall request or provide the supplemental information within five (5) business days of receipt of the Notice of Appeal. Failure to request or receive supplemental information timely shall be a valid reason to reschedule the hearing to a time when the supplemental information is available.

23.10.103.4.7 Appeal filing fee.

The cost of filing an appeal to the Building Board is \$500 and shall accompany the filing of the appeal. If a three-member hearing panel denies an appeal, the appellant may request a de novo hearing by the full Building Board for an additional filing fee of \$500. The fee shall accompany the de novo hearing request. There is no fee for a de novo hearing request made by a Building Board member where no conflict of interest exists or by the Building Official.

23.10.103.5 Violations.

23.10.103.5.1 Unlawful acts.

It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

23.10.103.5.2 Notice of violation.

The Building Official or Fire Code Official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

23.10.103.5.3 Investigation.

Whenever work for which a permit is required by this code is commenced without first obtaining a permit, a code compliance inspection for one or more disciplines may be required before a permit is issued for such work.

23.10.103.5.4 Prosecution of violation.

If a person does not comply with a notice of violation or order, the Building Official is authorized to request the municipal attorney of the Municipality to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

23.10.103.6 Stop work order.

23.10.103.6.1 Authority.

Whenever the Building Official or Fire Code Official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the Building Official or Fire Code Official is authorized to issue a stop work order.

23.10.103.6.2 Issuance.

The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately

1 cease. The stop work order shall state the reason for the order, and the
2 conditions under which the cited work is authorized to resume.

3
4 **23.10.103.6.3 Unlawful continuance.**

5 Any person continuing any work after being served with a stop work order,
6 except such work as the person is directed to perform to remove a violation
7 or unsafe condition, shall be subject to penalties as prescribed by law.

8
9 **23.10.103.7 Penalties and remedies.**

10
11 **23.10.103.7.1 Violation penalties.**

12 Any person violating a provision of this code or failing to comply with the
13 requirements thereof or who erects, constructs, alters or repairs a building
14 or structure in violation of the approved construction documents or directive
15 of the Building Official, or of a permit or certificate issued under the
16 provisions of this code, shall be subject to penalties as prescribed by law
17 including but not limited to those in Table 3-O of this code.

18 When work is begun without proper permits, a fine at a rate shown in Table
19 3-O shall be assessed. The payment of the fine shall not exempt an
20 applicant from compliance with all other provisions of this code nor from the
21 penalty prescribed by law. The Building Official may waive the fine for a first
22 offense.

23
24 **23.10.103.7.2 Contractor license suspension or revocation.**

25 The Building Official may cancel, suspend, or revoke the license of a
26 contractor who displays incompetence or lack of knowledge in matters
27 relevant to such license, seeks to obtain a building permit or pass an
28 inspection by fraudulent methods, or knowingly performs work multiple
29 times without first obtaining the required permit(s) or if such license was
30 obtained by fraudulent measures. If the license of any person is so
31 cancelled or revoked, another such license shall not be granted to such
32 person within one year after the date of such cancellation or revocation.
33 When a contractor accumulates five violations for not obtaining building
34 permits before performing work or other violations within a five-year period,
35 the Building Official shall revoke the license of the contractor. Notice of the
36 revocation shall be sent to the Alaska Department of Commerce,
37 Community and Economic Development.

38
39 **23.10.103.7.3 Civil Penalties.**

40 In addition to any other remedy or penalty provided by this title, any person
41 violating any provision of this title, or any code of technical regulation
42 adopted pursuant to this title, shall be subject to the civil penalties or
43 injunctive relief, or both, as provided by section 1.45.010B., or fines may be
44 assessed according to the schedule provided in Title 14.

23.10.103.7.4 Civil Actions.

Any person aggrieved by the act or omission of another person constituting a violation of the provisions of this title or the codes of technical regulation adopted herein may, following 30 days written notice to the municipal official or department empowered to enforce the provision, commence and maintain a civil action for injunctive relief authorized by section 1.45.010B. The court, in issuing a final order in any action brought by a private person under this section may, in its discretion, award costs of litigation to any party. In any action under this section, the Municipality, if not a party, may intervene as a matter of right.

Section 104 Permit requirements.

23.10.104.1 Permits required.

Any owner, contractor, or authorized agent intending to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building, structure or portion thereof, or to erect, install, enlarge, alter, repair, remove, convert or replace any fire, electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the Building Official and obtain the required permit unless work is specifically exempted by this code.

23.10.104.1.1 Emergency repairs.

Where equipment replacements and repairs must be performed after hours in an emergency situation, the contractor shall call the Building Safety Hotline (343-7500) before commencing the work. The permit application shall be submitted within the next working business day to the Building Official.

23.10.104.1.2 Parcels with multiple structures.

Each independent structure on a parcel with multiple structures requires a separate building permit unless otherwise approved by the Building Official.

23.10.104.1.3 Condominium associations.

An approval letter from the applicable condominium association shall be submitted for all permits that include work to the common areas of the building or those that will result in a structural change to the building. Examples include replacement of furnaces, boilers, water heaters, and other equipment for shared use or in common areas, structural modifications to common areas or individual units, deck additions or modifications, reroofing, and siding replacement or repair. Any construction

that affects the appearance or structural integrity of the building must have an approval letter.

Where a condominium association is the applicant, the approval letter will include a designation of an authorized agent. At the condominium association's discretion, they may select the contractor to act as their authorized agent. Where responsibility for scope of work is to be shared between the condominium association and individual owners, the approval letter will clearly define that scope and individual owners will seek separate building permits for their scope of work.

23.10.104.2 Work exempt from permit.

Exemptions from permit requirements of this code shall not be deemed to grant authorization for work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of the Municipality. Exemptions from the requirement for a permit shall not constitute an exemption from the licensing requirements in AMC section 23.10.105.

23.10.104.2.1 Building permit exemptions.

A building permit shall not be required for the following:

- A. One-story detached accessory buildings used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 200 square feet.
- B. Fences of light-frame construction not over eight feet high.
- C. Oil derricks.
- D. An isolated retaining wall where the retained height measured from the bottom of the footing to the top of the retained soil at the face of the wall is not more than 4 feet and the top of the wall above the retained soil is not more than one foot. Multiple walls, separated by terraces to form an aggregate wall height greater than 4 feet are also exempt where the clear distance between the back face of the lower wall and the front face of the upper wall is greater than two times the retained height of soil of the lower wall.
- E. Water tanks supported directly upon grade, if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
- F. Platforms, walks, stairs, ramps and driveways not more than 30 inches above grade, not over any basement or story below and are not part of an accessible route.
- G. Stairs and decks serving a manufactured home installed on a non-permanent foundation.
- H. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work.

- I. Temporary motion picture, television and theater stage sets and scenery.
- J. Prefabricated swimming pools accessory to a Group R, Division 3 Occupancy, less than 24 inches deep, do not exceed 5,000 gallons and installed entirely above ground.
- K. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support.
- L. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.
- M. Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.
- N. Swings and playground equipment.
- O. Construction site job shacks and fences on legal permitted construction sites.
- P. Storage racks not over eight feet high.
- Q. Artwork eight feet or less tall, where the center of gravity of the structure falls below the mid-height of the structure.
- R. Grave markers.
- S. Roof antennas or dishes weighing less than 400 lbs. not mechanically anchored and where the existing roof structure and antenna stability under design wind loads are checked by a civil or structural engineer licensed in the State of Alaska.
- T. Replacement of windows and doors where the rough opening is not enlarged.
- U. Repair or replacement of exterior nonstructural wall and roof coverings or siding, excluding T1-11 material, where the total cost of the repair or replacement using fair market value of materials and labor does not exceed \$10,000.
- V. Repair or replacement of gypsum wall board wall and ceiling finish material where the total cost of the repair and replacement using fair market value of materials and labor does not exceed \$10,000. This exception does not apply to code required fire resistive construction.
- W. Temporary structures erected for less than 15 days. Note: Tents or Membrane structures may require an operational permit per AMC 23.45.

Unless otherwise exempted by this code, separate plumbing, electrical and mechanical permits shall be required for the above exempted items.

23.10.104.2.2 Electrical permit exemptions.

An electrical permit shall not be required for the following:

- A. Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an

approved receptacle when the cord or cable is permitted by the Electrical Code.

- B. Repair or replacement of fixed motors, transformers or fixed approved appliances of the same type and rating in the same location.
- C. Temporary decorative lighting.
- D. Repair or replacement of current-carrying parts of any switch, contactor or control device.
- E. Reinstallation of attachment plug receptacles, but not the outlets.
- F. Repair or replacement of any overcurrent device of the required capacity in the same location.
- G. Repair or replacement of electrodes or transformers of the same size and capacity in the same location.
- H. Removal of electrical wiring.
- I. Temporary wiring for experimental purposes in suitable experimental laboratories.
- J. Wiring for temporary theater, motion picture or television stage sets.
- K. Low-energy power, controls and signal circuits of Class II and Class III as defined in the Electrical Code.
- L. Installation, alteration or repair of electrical wiring, apparatus or equipment for the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility.
- M. The provisions of this code shall not apply to electrical equipment used for radio and television transmissions but shall apply to equipment and wiring for power supply, the installations of towers and antennas.
- N. Installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

23.10.104.2.3 Mechanical permit exemptions.

A mechanical permit shall not be required for the following:

- A. A portable heating appliance.
- B. Portable ventilation equipment.
- C. A portable cooling unit.
- D. A portable evaporative cooler.
- E. Steam, hot water or chilled water piping within any heating or cooling equipment or appliance regulated by AMC 23.
- F. The replacement of any minor part that does not alter the approval of equipment or appliance or make such equipment or appliance unsafe.

- G. Self-contained refrigeration system containing 10 pounds or less of refrigerant or that are actuated by motors of one horsepower or less.
- H. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

23.10.104.2.4 Plumbing permit exemptions.

A plumbing permit shall not be required for the following:

- A. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
- B. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
- C. The replacement of a hose bibb, drinking fountain, wash fountain, sink or lavatory, including the faucet, provided such replacement does not involve or require the replacement or rearrangement of piping other than a trap or trap arm.
- D. The replacement of a water closet, bidet or urinal, including the flushometer valve, provided such replacement does not involve or require the replacement or rearrangement of piping.

23.10.104.2.5 Fire permit exemptions.

A fire system permit shall not be required as regulated by the International Fire Code.

23.10.104.3 Temporary and seasonal use structures.

23.10.104.3.1 Temporary structures.

Buildings, structures, sheds, canopies, fences, reviewing stands and other structures of a temporary nature, intended to be occupied more than 14 days, may be erected and occupied by permit from the Building Official excluding structures of group R-Occupancies as defined in the International Building Code. Temporary uses and structures shall comply with AMC 21.05.080.

- A. Temporary structures may be erected without meeting all requirements for permanent structures provided they meet the following conditions:
 - 1. The size of the structure shall not exceed 1,500 square feet nor be more than one story in height unless otherwise approved by the Building Official.

2. The structure shall meet the required setbacks and separation from adjacent buildings as provided by municipal land use regulations, but in no case less than ten feet.
 3. Temporary structures for public use shall comply with the building code for accessibility.
 4. Temporary structures shall meet structural requirements for type of materials, spans, and stresses as determined to be safe by the Building Official.
 5. Manufactured structures, including mobile homes and trailers, are allowed. Homemade mobile homes or trailers shall not be allowed.
 6. The structure and all associated materials shall be removed from the approved location on or before the expiration date of the permit.
 7. Permits for temporary structures shall be valid for a maximum of 180 days or as further limited by AMC 21.050.080. Permits may be extended on a one-time basis a maximum of 180 days or as further limited by AMC 21.050.080. Extension of temporary structure permit may be granted by the Building Official upon application to the Development Services Department with a payment per Table 3-A.
 8. After a temporary structure is removed from a lot, parcel or tract of land, no temporary structure may be placed at the same location for a period of at least 180 days.
 9. Normally occupied temporary structures shall be provided with toilet facilities having sufficient capacity for the occupant load in accordance with the building code.
- B. Final Inspections and closeout of the temporary structure permit is required.

23.10.104.3.2 Seasonal use structures.

Temporary structures occupied for 180 days or less per calendar year may be occupied on a seasonal basis and be considered a seasonal use structure. Seasonal use structures are subject to the same limitations and requirements as temporary structures, except as follows:

- A. An annual permit shall be obtained, and an annual code compliance inspection performed prior to the establishment of the use or occupancy for each calendar year;
- B. The annual code compliance inspection shall certify there are no hazards to health, life, or safety and proper maintenance of the structure or installations has been performed prior to re-occupancy;
- C. Occupancy of seasonal use structures may be resumed only if permitted and occupied within 365 days of the last occupancy, use or

vacation. If not, the structure shall be removed from the premises so as to leave it in a clean, level, nuisance-free condition.

23.10.104.3.3 Temporary and seasonal use permit applications.

The application for a temporary or seasonal use permit shall include:

- A. Property owner's name and mailing address;
- B. Legal description of the proposed site with a plot plan showing the proposed location of the structure on the premises, location of any existing structures, and the location of any existing or proposed parking areas;
- C. Length of use of the proposed structure. A permit is not required if the use is 14 days or less. However, exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in violation of the provisions of this section or any other laws or ordinances of the Municipality;
- D. Description of the proposed use and a justification of temporary or seasonal occupancy;
- E. All required fees.

23.10.104.3.4 Temporary and seasonal use permit fees.

A nonrefundable fee shall accompany applications for temporary or seasonal use structures. See Table 3-A of this code for applicable fee. Applications for the annual code compliance inspection for seasonal use structures shall be accompanied by the renewal fee.

23.10.104.4 Retrofit permits.

Retrofit permits are limited to projects involving fire, electrical, plumbing and mechanical installations where engineering is not required by state law. Retrofit permits shall not be used on projects involving work requiring a building permit or projects requiring a change of use permit. Electrical, plumbing and mechanical retrofit permits may be used on the same project. Plan review is not required. Retrofit permits are limited in scope-of-work as follows:

- A. One new 20 amp circuit having no more than six general purpose receptacles or light fixtures.
- B. No more than six general purpose receptacles or light fixtures added to one or more existing 20 ampere circuits.
- C. One 20 amp circuit for a sign.
- D. An electrical, plumbing or mechanical alteration to a residential building containing 4 or fewer dwelling units.
- E. An electrical, plumbing or mechanical alteration to a commercial building or a residential building containing more than 4 dwelling units where the scope of work is sufficiently minor to allow a

determination that engineering is not required. Pre-approval by a plan review engineer is required.

F. The like for like replacement of plumbing, mechanical and electrical equipment, fixtures and appliances.

G. Fire systems regulated by the International Fire Code as amended under AMC 23.45.

Mechanical, plumbing and electrical installations exceeding the above listed parameters generally require engineering in accordance with state law. A commercial trade permit is required in lieu of a retrofit permit when engineering is required.

23.10.104.5 Public service utilities.

A permit shall not be required for the installation, alteration, or repair of generation, transmission, distribution or metering or other related equipment under the ownership and control of public service utilities by established right.

23.10.104.6 Permit application requirements.

To obtain a permit, the applicant shall first file an application on a form furnished by the department. The application shall:

- A. Identify and describe the work covered by the permit for which application is made.
- B. Describe the land on which the proposed work is to be done by legal description, tax parcel number, or street address to readily identify and definitively locate the proposed building or work.
- C. Indicate the use or occupancy for which the proposed work is intended.
- D. Be accompanied by plans, diagrams, computations and specifications, and other data as required in this code or as further defined by MOA policy.
- E. State the valuation of the proposed work. Valuation shall be as defined in sections 23.10.102.1 and 23.10.104.14.1.
- F. Be signed by the owner, contractor, Architectural or Engineering licensed professional in responsible charge, or the owner's authorized agent. If authorized agent will be signing, a statement from the owner, naming authorized agent to be acting on the owners' behalf shall be submitted. If the statement cannot be confirmed to be provided by the owner or is provided by an unknown agent, the Building Official may require the statement to be notarized.
- G. Be accompanied by other data and information as may be required by the Building Official.
- H. Be accompanied by proof of a residential contractor endorsement issued by the State of Alaska if the work under application is an

alteration exceeding 25 percent of the value of a residential structure of one to four units, or construction of a residential structure of one to four units. This requirement does not apply to an individual administering or performing work on their own residence.

- I. Include an estimate of the number of inspections required to complete the project for the following permit types, which are charged on a fee-per-inspection basis:

1. Change of Use;
2. Demolition;
3. Relocatable Set-up;
4. Mobile **Vendor [Food]** Units; and
5. Trade Permits involving mechanical, electrical, or plumbing work but no structural work.

23.10.104.7 Design professional in responsible charge.

When it is required that documents be prepared by a registered design professional, the Building Official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered professional in responsible charge. The Building Official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties. Any changes to design documents following designation of a new design professional in responsible charge shall be done in strict accordance with State of Alaska statutes and regulations governing architects, engineers, and land surveyors. The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building. Where structural observation is required by the building code, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur (see also Special Inspection Program).

23.10.104.8 Optional third-party plan review.

- A. *General.* An applicant for a residential or commercial building permit shall have the option for qualified third-party reviewing professionals to conduct the reviews listed under section 23.10.104.9.B. It shall not be the responsibility of the Building Official to review disciplines for

building code compliance that have been reviewed and stamped in accordance with this section by qualified third-party professionals.

B. *Exclusions*: This option is not available for:

1. Risk category III and IV structures as defined in the International Building Code.
2. Structures exceeding 100 feet in height above grade plane.
3. Normally occupied buildings that are four or more stories or 45 feet or more above grade plane.
4. Buildings and structures owned or leased by the Municipality of Anchorage including the Anchorage School District.

C. *Review disciplines*. The following review disciplines qualify for optional third-party plan review:

1. Structural review consisting of the review of structural plans and associated calculations for compliance with the building codes, local amendments, and referenced standards adopted under this Title.
2. Architectural review of the nonstructural provisions of the building codes, local amendments, and referenced standards, including review for compliance with the building envelope energy conservation code provisions, adopted under this Title. Review for compliance with the International Fire Code is performed by the Anchorage Fire Department and is excluded from this option.
3. Electrical review for compliance with the electrical code, local amendments, and referenced standards, including the electrical provisions of the energy conservation code, adopted under this Title.
4. Mechanical review for compliance with the mechanical, fuel gas and plumbing codes, local amendments thereto, and referenced standards, including the mechanical provisions in the energy conservation code, adopted under this Title.

D. *Reviewer qualifications*. The department shall pre-qualify all reviewers, shall maintain a list of approved reviewers, and assign each a reviewer identification number. Only approved reviewers may perform the optional third-party plan review allowed under this section. A reviewer may qualify for more than one discipline. To apply for inclusion on the list, a person shall first submit an application on a form furnished by the department and include a resume detailing relevant experience. The department shall approve an applicant meeting the requirements set forth below and who has not had the person's state registration revoked or suspended by the state in the previous five years. The minimum qualifications to perform review, by discipline, are as follows:

1. Structural review shall be performed by a professional engineer currently registered by the State of Alaska Board of Registration for Architects, Engineers and Land Surveyors as either a structural engineer or a civil engineer. A reviewing civil or structural engineer must be able to demonstrate a minimum of 5 years of structural engineering experience in Alaska or a similar climate and seismic zone as Anchorage.
2. Architectural review shall be performed by a professional architect currently registered by the State of Alaska Board of Registration for Architects, Engineers and Land Surveyors or by an engineer currently registered by the State of Alaska Board of Registration for Architects, Engineers and Land Surveyors possessing an International Code Council Building Plans Examiner certification. Review of plans for detached residential buildings with three or fewer dwelling units may be performed by an individual having an International Code Council Building Plans Examiner certification. A person performing architectural review must be able to demonstrate a minimum of 5 years of building design and/or review experience in Alaska or a similar climate.
3. Electrical review shall be performed by a professional engineer currently registered by the State of Alaska Board of Registration for Architects, Engineers and Land Surveyors as an electrical engineer. A reviewing electrical engineer must be able to demonstrate a minimum of 5 years of building electrical design experience in Alaska or a similar climate.
4. Mechanical, fuel gas and plumbing review shall be performed by a professional engineer currently registered by the State of Alaska Board of Registration for Architects, Engineers and Land Surveyors as a mechanical engineer. A reviewing mechanical engineer must be able to demonstrate a minimum of 5 years of building mechanical design experience in Alaska or a similar climate.

E. Process.

1. Reviews shall be conducted only by individuals selected from the department's list of approved review professionals.
2. No permit application will be accepted where a third-party review professional or a member of their household or immediate family serves as a designer of the project, is an employee of the firm or company acting as the engineer or architect of record for the project, or has a business or financial interest in the completed project. For purposes of this

section, the definition of "immediate family" in the Ethics Code, section 1.15.180, shall apply.

3. Reviewing professionals shall be selected and paid for by the owner or the owner's authorized agent.

4. The applicant shall designate on the building permit application that the third-party plan review option has been elected and completed in accordance with this section and shall list each review discipline elected along with the names of the selected third-party reviewers.

5. Third-party reviews shall be finalized in advance of submitting the reviewed plans to the municipality.

6. To be considered a complete third-party plan review, the reviewed plans shall be physically or electronically stamped "Reviewed for Code Compliance" by the third-party reviewer, with the stamp including the reviewer's name, signature, date and municipality designated third-party reviewer identification number assigned by the department.

7. Change orders and deferred submittals shall be reviewed and approved by the same third-party reviewers prior to submittal to the department.

F. *Letter of review.* Each third-party plan reviewer shall submit a signed letter of review to accompany the permit application. The letter shall include:

1. Description of the scope of work and scope of review,
2. Detailed description of the reviewer's design and review experience relevant to the specific project,
3. List of comments, issues identified and corrections made to the completed plans,
4. Notes and calculations required by this Title from the plan review process,
5. Statement the reviewer accepts responsibility for the review and does not have a conflict of interest prohibited by subsection D.2., and
6. Statement the reviewer indemnifies, holds harmless and shall defend the municipality from and against all claims, damages, losses and expenses, including but not limited to attorney fees and costs, arising out of or resulting from the performance of the review, to the fullest extent permitted by law. This statement shall be in a form approved by the municipal risk manager and be executed by: (a) the reviewing professional; (b) the building construction contractor; and (c) the current owner of the property and any party under contract to purchase the property within a year of its completion.

G. *Restriction of authority.* Third-party reviewing professionals do not have authority to approve code modifications or alternative materials, designs, and methods of construction and equipment as defined in this Title. Any request for consideration of code modifications or alternative materials, designs, and methods of construction and equipment shall be submitted to the Building Official for approval prior to or with the permit application.

H. *Auditing.*

1. The Building Official may audit the reviews conducted by third-party reviewing professionals as necessary to enforce the provisions of this Title.
2. The Building Official shall audit a minimum of 10 percent of the reviews submitted under this optional third-party plan review process.

I. *Revocation of privilege.* The Building Official may revoke the approved reviewer status of any individual who has their registration suspended or revoked by the state, is found to have provided materially false statements or information on the reviewer application or in a letter of review, or who commits fraudulent acts in the course of providing plan reviewer services. False statements are punishable as unsworn falsification under applicable law. The Building Official shall provide the person a reasonable opportunity to respond to the grounds for revocation before making a final decision. The Building Official's final decision under this subsection shall be provided in writing as a notice to the individual consistent with section 23.10.103.3.3.

23.10.104.9 Submittal documents.

Construction documents, statement of special inspections, structural observation programs, geotechnical reports and other data shall be submitted in accordance with the policies prescribed by the Building Official. The construction documents shall be prepared by a registered design professional where required by state statute. Where special conditions exist, the Building Official is authorized to require additional construction documents to be prepared by a registered design professional.

A. **Exceptions:**

1. The Building Official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.
2. Only one copy of specifications and calculations are required.

23.10.104.9.1 Information on construction documents.

Construction documents shall be legible, dimensioned and drawn upon suitable material. The text on the field set of plans shall be a minimum of 3/32 inch in height. Information on plans shall be organized in a logical manner to be readily understandable by contractors, plan reviewers and inspectors. Electronic media documents are permitted to be submitted when approved by the Building Official. Construction documents shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed and show in detail that the work will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the Building Official. Extraneous details or other information not related to the project shall not be included on the drawings.

Plans for buildings of other than a detached dwelling unit or accessory structure regulated by the IRC, or a single-story Group U occupancy shall indicate how required structural and fire-resistive integrity will be maintained where penetrations are made for electrical, mechanical, plumbing and communication conduits, pipes and similar systems.

23.10.104.9.2 Fire protection system shop drawings.

Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with the fire code. The construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the fire code.

23.10.104.9.3 Means of egress.

The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than detached single family dwelling units, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

23.10.104.9.4 Exterior envelope.

Construction documents for all buildings shall describe the exterior wall and roof envelope in sufficient detail to determine compliance with this code.

The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions providing supporting documentation that the proposed

penetration and opening details described in the construction documents maintain the weather resistance of the exterior envelope. The supporting documentation shall fully describe the exterior system, which was tested, where applicable, as well as the test procedure used.

23.10.104.9.5 Site plan.

The construction documents submitted with the permit application shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades, proposed finish grades and elevations at all lot corners, based on ties to a recovered benchmark identified in the MOA Benchmark Network. Assumed elevations shall only be allowed with prior written consent of the department. The site plan shall also show existing and proposed drainage patterns, identifying any location where drainage is proposed to be transported off-site; and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished, and the location and size of existing structures and construction to remain on the site or plot. Any changes to existing topography must also conform to the requirements of Chapter 23.105, Grading, Excavation and Fill, and Landscaping. The Building Official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

23.10.104.10 Deferred submittals.

For the purposes of this section, deferred submittals are defined as those portions of the design not submitted at the time of the application. Deferral of any submittal items shall have the prior approval of the Building Official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the Building Official. Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review and forward them to the Building Official with a notation indicating the deferred submittal documents have been reviewed and been found to be in general conformance with the design of the building. The notation must be clearly outlined on the documents and must be accompanied by the signature of the registered design professional in responsible charge. The deferred submittal items shall not be installed until the design and submittal documents are approved by the Building Official. Copies of the approved deferred submittal documents shall be kept on site for reference by inspectors.

23.10.104.11 Amended construction documents.

Work shall be installed in accordance with the approved construction documents, and any changes made prior to or during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents through a change order. Changes of a minor nature may utilize the field change order process.

23.10.104.12 Retention of construction documents.

The Building Official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. One set of approved plans, specifications and computations shall be retained in the official records for the period required for retention of public records, and one set of approved plans and specifications shall be returned to the applicant and shall be kept on the site of the building or work at all times while the work authorized thereby is in progress. The Building Official will provide digital long-term retention documentation as per approved retention plan adopted by the Assembly including but not limited to the following items: Applications, permits, certificates issued, fees collected, reports of final inspections, and all notice and orders.

23.10.104.13 Document approval and permit issuance.

23.10.104.13.1 Document examination and approval.

The application, plans, specifications, computations and other data filed for permit shall be reviewed by the Building Official. Such plans may be reviewed by other departments of the Municipality to verify compliance with any applicable laws under their jurisdiction. Once all documents are reviewed and approved by all departments of the Municipality, the Building Official shall stamp the approved plans "Reviewed for Code Compliance". Such approved plans shall not be changed, modified or altered without authorization from the Building Official, and all work regulated by this code shall be done in accordance with the approved plans. Once documents are approved, all changes made shall require a change order or field change order.

It shall be the Building Official's option to require an express plan review for one or more plan review disciplines following two or more unsuccessful attempts to resolve plan review comments.

For applications submitted under section 23.10.104.9, when the Building Official finds the application complete in meeting the requirements for acceptance of plan review and building code compliance responsibilities by

the independent reviewing professional(s), the Building Official shall stamp the accepted plans "Accepted". Once documents are accepted, all changes made shall require documentation of the changes by change order or field change order, showing review and approval by the independent reviewing professional and acceptance by the Building Official. One set of construction documents so reviewed or accepted shall be retained by the Building Official, and one set shall be kept at the site of work and shall be open to inspection by the Building Official or a duly authorized representative.

23.10.104.13.2 Express plan review.

Express plan review is an option exercised by the permit applicant or Building Official to expeditiously resolve plan review comments.

- A. Limitation: The permit applicant may request an express plan review any time after the initial plan review is completed.
- B. Eligible Projects and Applicable Reviews: Any permit or plan review discipline, including architectural, structural, plumbing, mechanical, electrical, fire, land use, traffic engineering, NPDES, right-of-way, flood hazard and Project Management and Engineering (PM&E) reviews. In addition, express plan review may be used for change orders and deferred submittals. Express plan review may be used on phased projects. For example, the structural, architectural and civil plans may be submitted for review prior to the plumbing, mechanical and electrical plans, and partial permits such as a footing and foundation permit may be issued.
- C. Submittal Requirements: Complete the express plan review application and schedule the plan review meeting as described below.
- D. Plan Review Meeting:
 1. The plan review meeting is the basis of the express plan review process.
 2. The permit applicant schedules the plan review meeting through the Development Services Assistant at 343-8301. The applicant specifies which disciplines are required to attend the meeting. All applicable design professionals and municipal plan reviewers are required to attend the meeting.
 3. The Municipality reviews plans and supporting documentation during the meeting.
 4. The meeting is intended to be a collaborative process between the design professionals and plan reviewers. The objective will be approval of code compliant construction documents.

5. Required corrections of a minor nature can be made to the plans and/or supporting documentation during the meeting. The design professional may either mark-up the plans by hand or submit new plans at a later time with the appropriate revisions. Changes made by hand shall be bubbled, initialed and dated by the design professional.
6. Corrections requiring redesign and/or substantial plan revisions shall be made outside the scope of the meeting.
7. Additional plan review meetings may be scheduled at the applicant's discretion as necessary to review revisions and obtain approval.

E. Fee: The express plan review fee is listed in Table 3-B. The fee is in addition to all other applicable permit fees. The fee applies to plan review meeting time and does not apply to plan review conducted outside the scope of the meeting. Payment is due prior to obtaining a permit.

F. Express Plan Review Availability: Express Plan Review is based on the availability of the plan review staff as determined by the Building Official.

23.10.104.13.3 Previous approvals.

This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

23.10.104.13.4 Expiration of plan review.

Applications for which no permit is issued within 365 days following the date of application shall expire by limitation and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant on written request by the applicant showing circumstances beyond the control of the applicant prevented action from being taken. An application shall not be extended if this code or any other pertinent laws or ordinances are amended subsequent to the date of application. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

23.10.104.13.5 Phased permit approval.

The Building Official may issue a permit for the construction of part of a building, structure or building service equipment before the entire plans and specifications for the whole building, structure or building service equipment

are submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of the technical codes. The holder of such permit shall proceed with the approved work at the holder's risk, without assurance the permit for the entire building, structure or building service will be granted. This approval must be approved by the Building Official and shall require written documentation prior to any work being done.

23.10.104.13.6 Permit issuance.

If the Building Official finds the work described in an application for a permit and the plans, specifications and other data filed conform to the requirements of this code, the technical codes, and other pertinent laws and ordinances, and all permit fees have been paid, the Building Official shall issue a permit to the owner, contractor or authorized agent. If a contractor is performing the work, the permit shall be issued in the name of the contractor. The issued permit placard shall be posted on site and shall not be taken down until the Certificate of Occupancy or Completion is issued. Exceptions: Prior to accepting a permit application or issuance of another permit, the Building Official may require a permit applicant to:

- A. Obtain a Certificate of Occupancy for an applicant's previous permit with an expired Conditional Certificate of Occupancy.
- B. Obtain a Certificate of Occupancy or Completion for an applicant's previous expired permit.
- C. Remedy a Stop Work Order or Notice of Violation on the applicant's other projects prior to accepting a permit application or issuance of another permit.

23.10.104.13.7 Validity of permit.

The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the Municipality. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the Municipality shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the Building Official from requiring the correction of errors in the construction documents and other data. The Building Official is also authorized to prevent occupancy or use of a structure in violation of this code or of any other ordinances of the Municipality.

23.10.104.13.8 Expiration of permit.

- A. **Building Permits.** All permits will expire as described in part 1 unless otherwise stated.

1. Every permit issued shall become invalid and expire unless the work on the site authorized by such permit is commenced within 365 days after its issuance or if the work is suspended or abandoned for a period of 365 days or more. The period for suspension or abandonment shall be based on the last inspection completed or other documentation as approved by the Building Official. A permittee may apply for an extension when the permittee is unable to commence work within the time required by this section. The Building Official may extend the time for action by the permittee upon written request by the permittee showing good and satisfactory reasons prevented action from being taken.
2. The work may be recommenced upon application for reactivation of the permit. The permittee will pay for the reactivation and the Building Official may apply additional fees and stipulations as follows:
 - a. If the permit is expired for 180 days or less, the Building Official may allow the permit to be reopened at no additional cost.
 - b. If the permit is expired more than 180 days but less than 365 days, the Building Official may charge up to half the Building Safety fee.
 - c. If the permit is expired more than 365 days, the Building Official may charge up to the full Building Safety fee. If there is a code change between the original permit issuance to the reactivation application, the Building Official may charge new plan review fees and require the drawings to be updated for a new plan review to be completed.
 - d. Notwithstanding items i through iii, when it can be demonstrated that a substantial amount of the previously permitted work has been inspected and approved, the Building Official may allow the permit to be reopened and complete all required inspections to close the permit. The permittee shall pay for any inspections required to close the permit. This will only be granted after review of the permit history by the Building Official and is at the Building Official's discretion.

B. Fill and Grade Permits. Unless the property has a valid Conditional Use approved by the Planning and Zoning Commission which sets a longer period-of-time for completion, grading permits shall be completed within two years of permit issuance. Once a grading

permit expires, a stop work order shall be issued and investigative fees shall be paid to reactivate the permit.

C. **Fire Protection and Life Safety System Permits.** All work under a permit to install, upgrade or replace a fire protection or life safety system regulated by the International Fire Code shall be complete and a certificate of completion obtained within one year following the date of permit issuance or be subject to fines.

Exceptions:

1. Upon written request by owner or owner's authorized agent explaining why an extension is required, and stating the new completion date, the fire marshal may grant an extension of up to one year.
2. Fire system permits associated with open building permits issued under AMC 23.10.104 are subject to the building permit expiration provisions of this section.

23.10.104.13.9 Suspension or revocation.

The Building Official may, in writing, suspend or revoke a permit issued under the provisions of this code and the technical codes when the permit is issued in error or on the basis of incorrect information supplied, or in violation of an ordinance or regulation or the provisions of these codes.

23.10.104.13.10 Revising application (removing permittee).

In order to remove the permittee on a specific permit from responsibility of completing the project and obtaining a certificate of occupancy, the "Formal Transfer of Responsibilities" form shall be completed and signed by the Owner and permittee being removed.

23.10.104.13.11 Securing suspended work.

If activity associated with a permit is suspended for a prolonged period, the site shall be secured against casual public access.

23.10.104.14 Fees.

Fees shall be assessed in accordance with the provisions of this section or shall be as set forth in the fee schedule adopted by the Municipality.

23.10.104.14.1 Valuation.

Valuation is determined as follows:

- A. The valuation used to compute fees for new construction shall be based on the Building Valuation Data Chart in the most recent August issue of the Building Safety Journal as published by the International Code Council. The regional multiplier shall be 1.3. The

1 rates in the August issue shall become effective on the following
2 January 1st and continue to January 1st of the following year. The
3 valuation shall be calculated using the dollar per square foot
4 method. The area of the building shall be the gross floor area; the
5 total horizontal area of all floors of a building, measured between
6 exterior faces of exterior walls, including interior balconies,
7 mezzanines, stairwells, elevator shafts, ventilation shafts, etc., but
8 excluding area without floor structure in atria.

9 1. The specific features listed below require a valuation
10 calculation as described:

- 11 a. The area located under canopies, eaves and overhangs
12 extending more than 4 feet from the building perimeter
13 shall be included in the building area. The area under free-
14 standing canopies along with the occupancy classification,
15 shall be used to determine valuation.
- 16 b. The valuation used to compute fees for finished
17 basements in single-family homes, duplexes, and triplexes
18 shall be calculated as 0.67 multiplied by the valuation for
19 new construction calculated under subsection A.
- 20 c. The valuation used to compute fees for partially finished
21 basements in single family homes and duplexes shall be
22 calculated at 0.40 multiplied by the valuation for new
23 construction calculated under subsection A.
- 24 d. The valuation used to compute fees for permanent fabric
25 structures shall be calculated as 0.50 multiplied by the
26 valuation for new construction calculated under subsection
27 A.

28 B. The valuation used to compute fees for projects other than new
29 construction calculated under item A. shall be provided by the
30 permit applicant and verified by the Building Official. The valuation
31 shall be the total cost required to complete the project presuming all
32 labor will be compensated and all materials will be purchased at fair
33 market value. Where volunteer labor or donated materials are
34 contributed, the valuation shall nevertheless include the fair market
35 value of donated labor and materials. The Building Official reserves
36 the right to require a copy of the signed construction contract to
37 verify valuation.

38 C. If an applicant prefers not to provide a copy of the signed
39 construction contract when questioned about the stated valuation,
40 the Building Official will calculate valuation using the Building
41 Valuation Data Chart as described in item A. to compute the
42 valuation as if the project were new construction, and then scale
43 this valuation by multiplying by the appropriate percentage identified

in the following table for minor, medium, major or full alterations.
The Building Official's determination of a project as being minor,
medium, major or full shall be final and not appealable.

Extent of Alteration	Valuation % of New Construction	Definition of the Extent of Alteration ¹
Minor	20%	Primarily cosmetic work (refinishing walls, ceilings, floors) with minor mechanical, electrical and plumbing work, and incidental structural work. No reconfiguration of space.
Medium	40%	Reconfiguration of less than 50% of the tenant space involving the addition/removal of walls/partitions and associated plumbing, mechanical and electrical work; modification/repair of ceiling systems; replacement of portions of glazing systems; medium projects may include minor changes to the exterior envelope or structural systems.
Major	60%	Reconfiguration of more than 50% of a tenant space involving the addition/removal of walls/partitions and associated plumbing, mechanical and electrical work; installation of new glazing systems and/or ceiling systems; upgrading of structural systems in limited areas to receive increased loads. Significant upgrades to mechanical, electrical or plumbing systems.
Full	80%	Near complete reconfiguration of space involving the demolition of nearly all non-load-bearing walls/partitions (leaving a structural shell) and the installation of new walls/partitions; replacement of electrical, mechanical and plumbing systems; structural upgrades to meet seismic provisions, or other substantial structural renovation, extensive structural repair.

¹ The extent of alteration includes one or more of the elements in the definition. The affected floor area shall be calculated on the entire areas of the rooms where alterations are proposed. If a project has areas for which it is reasonable to distinguish as being of different categories, it is appropriate to calculate the area separately to develop the value.

23.10.104.14.2 Plan review fees.

- A. Plan review fees shall be calculated in accordance with Table 3-B and prior to commencement of plan review.
- B. Plan review fees are in addition to Building Safety fees.

- C. Other than driveway review fees which are assessed on a case-by-case basis, pursuant to AMC 23.45.503.7, a Fire Department Plan Review fee is not required for detached one,-two,- and three family dwellings.
- D. Plan review fees calculated as a percentage of the Building Safety fee on fee-per-inspection permits shall be adjusted accordingly based on actual number of inspections used.
- E. Where plans are incomplete or changed so-as-to require additional plan review, an additional plan review fee for the required discipline(s) shall be applied and paid for at the rate shown in Table 3-B of this code.
- F. Structures that are identical to a previously approved and permitted structure may qualify for "pre-approved" status for purposes of the building plan review fee assessment. The plans must be submitted within the same code cycle. Each identical structure shall be issued a separate building permit.
- G. Plan review fees for projects submitted under the optional process described in section 23.10.104.9 qualify for a reduced fee, as noted in Table 3-B.

23.10.104.14.3 Building Safety fees.

Building Safety fees depend on the type and extent of construction. Some projects may require more than one type of permit fee, e.g., a building containing an elevator will require a general building permit and an elevator permit. Where a technical code is adopted by the Municipality for which no fee schedule is shown in this code, the fee required shall be in accordance with the schedule established by the Assembly. Building Safety fees shall be assessed as follows:

- A. Fees for new construction, additions, alterations to existing buildings and repairs shall be based on valuation determined per 23.10.104.14.1 and calculated in accordance with Table 3-A.
- B. Fees for stand-alone plumbing, mechanical and/or electrical work that does not involve structural or alteration work and that does not qualify as a retrofit permit shall be assessed in accordance with Table 3-C.
- C. Fees for change of use and/or occupancy classification that do not involve alteration work shall be assessed in accordance with Table 3-A.
- D. Fees for a temporary gas or electrical service that is not associated with a building permit shall be assessed in accordance with Table 3-D.
- E. Fees for retrofit permits shall be assessed in accordance with Table 3-E.

- F. Elevator, escalator, moving walk, dumbwaiter, platform-lift and stairway chairlift permit and inspection fees shall be assessed in accordance with Table 3-F.
- G. Clearing, Grading, excavation and fill permit fees shall be assessed in accordance with Table 3-G.
- H. Residential re-roof permit fees shall be assessed in accordance with Table 3-H.
- I. Manufactured (mobile) home set-up permit fees shall be assessed in accordance with Table 3-I.
- J. Sign and Artwork permit fees shall be assessed in accordance with Table 3-J.
- K. Fire systems permit fees shall be assessed in accordance with Table 3-M.

For permit fees assessed on the number of inspections, the applicant shall estimate the number of inspections by discipline. The Building Official will assist the permit applicant with the initial estimate. The Building Official reserves the right to correct the estimate based on historic information for similar projects. A refund will be granted for inspections not used. Additional fees are required for inspections exceeding the estimated number.

23.10.104.14.4 Digital maintenance fee.

Each permit may be subject to a non-refundable digital maintenance fee. See AMC 23.10.109 Table 3-A for applicable fees on permits.

23.10.104.14.5 Fee refunds.

- A. The Building Official shall refund a fee that is paid or collected in error.
- B. The Building Official may grant a full refund of the entire permit fee if no work has been done by the Municipality, and the permittee shows the cancellation of the permit was beyond the permittee's control.
- C. The Building Official may refund up to eighty percent (80%) of the Building Safety fee if no inspections have been completed. The Building Official may require a no-cost inspection to be performed for any permit cancelled after a building permit has been issued to verify no work has been done if the applicant/permittee cannot provide adequate verification.
- D. The Building Official may refund up to sixty percent (60%) of the Building Safety fee paid when a permit is cancelled after a permit has been issued and any inspections have been performed.
- E. The Building Official may refund the full plan review fee if the permit is cancelled before any review has begun. Plan review fees shall not be refunded for any disciplines that have completed a review.

F. The Building Official shall not refund any fee unless it is requested in writing by the original permittee.

G. Permits expired by more than 365 days are not entitled to a refund.

Exception: For permits expired four years or less, if no inspections have been completed by the Municipality and the permittee is issued a new building permit for the same parcel, the Building Official may grant a refund of the lesser of:

1. 80% of the original Building Safety Fee.
2. 80% of the new Building Safety Fee.
3. \$10,000.

23.10.104.15 Mobile vendor ~~[food]~~ units.

A. Mobile vendor ~~[food]~~ units, including coffee carts, food or beverage sales and service, vendors of retail goods such as apparel or collectibles, direct to consumer services, and similar consumer-facing activities ~~[coffee huts]~~, (hereafter within this section referred to as units) must obtain a building permit but are exempt from building plan review and building inspections except as required by this section under the following restrictions and requirements:

1. The unit shall not exceed 8 feet 6 inches in width, 48 feet in length or 15 feet in height, including overhangs.
2. The unit shall be readily moveable and one of the following:
 - a. Currently titled and licensed by the State of Alaska as a motor vehicle or a trailer having a tow hitch, chassis, axles, wheels and trailer lamps and reflectors in compliance with AMC chapter 9.44.
 - b. A pushcart as defined in AMC 16.60.050 and that satisfies the requirements of AMC 16.60.230F.
 - c. A factory built, readily moveable, intermodal shipping container repurposed to function as a mobile vendor ~~[food]~~ unit which can be lifted or dragged onto a trailer or vehicle within one calendar day for transport.
3. The unit shall obtain approval by the Anchorage Health Department ~~[of Health and Human Services]~~, if applicable for products or services offered for sale.
4. Approval and a permit, where applicable, shall be obtained from a public utility prior to connecting to the utility's services.
5. If the unit is to be connected to a public utility's water supply or wastewater system, a licensed plumbing contractor shall obtain a retrofit permit and perform the work. The water supply shall be isolated by a reduced pressure backflow assembly.

6. If the unit is to be connected to a natural gas supply, a retrofit permit shall be obtained by one of the following:
 - a. A licensed plumbing contractor, or
 - b. A licensed mechanical contractor that employs a licensed plumber or gas fitter.
7. A licensed electrical contractor shall obtain a permit to provide electrical service and/or connection to the unit. The electrical connection shall consist of an approved flexible cord, attachment cap and receptacle approved for the location.
8. The unit shall comply with the National Electrical Code as noted by NEC 550.4 (A). A code compliance inspection shall be performed, and necessary corrections made before power is connected. A licensed electrical contractor shall obtain a permit and make the corrections. The permit for providing electrical service and/or connection may include the corrections when performed by the same contractor.
9. Service equipment located adjacent to the unit or vehicle lanes shall be provided with bollards or other substantial protective barriers.
10. The unit shall not reduce the required number of parking spaces at existing facilities.
11. The m[M]obile **vendor [food]** unit[s] shall be an allowable use in the zoning district where the unit is proposed to be located.
12. Units shall comply with fire plan review and operational processes as determined by the fire marshal. These include, but are not limited to:
 - i. An Anchorage Fire Department approved, currently serviced fire extinguisher shall be located inside the unit.
 - ii. Propane tanks shall be protected from vehicle impact and shall be located in accordance with the fire code.
 - iii. The unit location shall not impact fire lanes or emergency vehicle access to nearby structures.
13. The unit location is subject to approval by traffic engineering.
14. Public occupancy for consumption of food or beverages shall not be allowed inside the unit. The unit may only be occupied by the owner and employees. Members of the public may only enter the unit for ordering and take out of food and beverages for consumption outside the unit.

15. The unit shall not be occupied as a residence or for sleeping purposes.

- B. Units that do not meet all restrictions and requirements listed in subsection A shall be considered a structure and require a full

building permit with building plan review and building inspections in accordance with this code.

C. After all authorized municipal code enforcement authorities have provided required inspections and find no violations of the provisions of this title or other laws enforced by municipal code enforcement agencies, the Building Official shall issue a Certificate of Completion, pursuant to AMC 23.10.107.6.

D. Application requirements: The following items are required at the time of the permit application:

1. A completed commercial permit application.
2. A site plan showing the unit location.
3. Approval from the Anchorage Health Department [~~of Health and Human Services~~] for compliance with requirements of AMC 16.60, as applicable to the goods and services offered for sale.
4. A current copy of the State of Alaska vehicle or trailer registration, if the structure is not a pushcart or a repurposed factory-built, readily movable, intermodal shipping container.

23.10.104.16 Shelter units located in allowed camps.

A. Definition. Shelter unit means a rigid structure of small size designed by the manufacturer to be portable and relocatable, and intended for limited, short-term use by individuals without permanent housing. A shelter unit may be for sleeping overnight (hereafter referred to as "sleeping unit") or provided ancillary to sleeping units for small gatherings of persons or for personal hygiene (hereafter referred to as "community unit"). A community unit may also house multiple individual sleeping units. Exclusions: common fabric tents typically available at retailers rated by the manufacturer for four person or less.

B. Shelter units must obtain a building permit but are exempt from building plan review and building inspections except as required by this section under the following restrictions and requirements:

1. Sleeping units shall not exceed 120 square feet gross floor area.
2. Community units shall not exceed 400 square feet gross floor area.

Exception: Community units meeting the requirements of relocatable ancillary buildings under AMC 23.95 may exceed this limit.

3. Shelter units shall be capable of supporting minimum 20 psf roof snow load and be able to resist minimum 95 mph

- allowable wind speed (120 mph ultimate wind speed). This requirement may be met by certification of the manufacturer.
4. Shelter units shall be restrained to resist wind load overturning. The attachment shall be designed and stamped by a licensed civil or structural engineer.
 5. Wall/roof panel finish material shall be tested in accordance with ASTM E84 and the flame spread shall not exceed 200 and the smoke developed index shall not exceed 450 (Class C finish material).
 6. Shelter units shall be located and arranged to allow for emergency responder access and snow removal.
 - a. Shelter units may be located adjacent to each other forming clusters with up to eight sleeping units per cluster. A community unit with two or less sleeping units inside shall count as two sleeping units for this provision. Clusters of shelter units shall be located ten feet minimum from permanent structures, property lines, support structures and other clusters.
 - b. A minimum clear space of at least 5 feet shall be provided on sides subject to snow shedding. This clear space may be shared by adjacent shelter units within a cluster.
 - c. A minimum clear space of at least 5 feet shall be provided in front (on the door side) of each shelter unit.
 7. The accumulation of trash, combustibles, and other obstructions shall not be allowed in the required clear space.
 8. Snow shall not be allowed to accumulate on the shelter unit.
 9. Electrical permit required:
 - a. A licensed electrical contractor shall obtain a permit to provide electrical service and/or connection to the shelter unit(s). The electrical connection shall consist of an approved flexible cord, attachment cap and receptacle approved for the location.
 - b. Shelter units shall comply with the National Electrical Code as noted by NEC 550.4(A). A code compliance inspection shall be performed, and necessary corrections made before power is connected. A licensed electrical contractor shall obtain a permit and make the correction. The permit for providing electrical service and/or connection may include the corrections when performed by the same contractor.

- c. Installations involving connection to more than one shelter unit require an electrical design sealed by an Alaska licensed electrical engineer.
 10. Occupants shall have access to on-site toilet, bathing facilities, and trash services.
 11. If any shelter unit is connected to a water supply or wastewater system, a licensed plumbing contractor shall obtain a permit and perform the work. A public water supply shall be isolated by a reduced pressure backflow assembly. A code compliance inspection shall be performed and necessary corrections made.
 12. If any shelter unit is to be connected to a natural gas or propane supply, a permit shall be obtained by one of the following:
 - a. A licensed plumbing contractor, or
 - b. A licensed mechanical contractor that employs a licensed plumber or gas fitter.
 13. Service equipment located adjacent to vehicle lanes shall be protected with bollards or other substantial barrier.
 14. Shelter units shall comply with fire code and operational processes as determined by the fire marshal. These include, but are not limited to:
 - a. An Anchorage Fire Department (AFD) approved, currently serviced fire extinguisher shall be located inside the shelter unit.
 - b. Propane tanks shall be protected from vehicle impact and shall be located in accordance with the fire code.
 - c. Shelter unit locations shall not impact fire lanes or emergency vehicle access to the units or nearby structures.
- C. Shelter units that do not meet all applicable restrictions and requirements listed in subsection B. shall require a full building permit with building plan review and building inspections in accordance with this code.
- D. After all authorized municipal code enforcement authorities have provided required inspections and find no violations of the provisions of this title or other laws enforced by municipal code enforcement agencies, the Building Official shall issue a Certificate of Completion, pursuant to AMC 23.10.107.6.

Section 105 Licensing requirements.

23.10.105.1 General provisions.

A. General: Except as allowed under subsections B. and C., no person shall administer or perform work regulated by this code except a person holding a valid, unexpired, and unrevoked contractor's license and/or a certificate of qualification as required by this code and state law.

B. Contractor Required: All work regulated by this code shall be administered by contractors licensed by the State of Alaska and the Municipality of Anchorage in the relevant trade. This licensing requirement applies regardless of whether the work is exempt from the requirement for a permit.

Exceptions:

1. A property owner may act as a contractor as follows:

- a. An owner may construct a maximum of one structure every two years. The start date of the two-year time limitation shall be the date of the certificate of occupancy. A permit to construct an additional structure cannot be issued during the two-year time limitation.
- b. An owner may administer alterations, including additions, to an existing structure.
- c. An owner of an individual dwelling unit located in a multi-dwelling unit structure may administer alterations within their dwelling unit.

2. A tenant may administer alterations within their lease space.

C. Performing Work: All work regulated by this code shall be performed by individuals appropriately licensed in the relevant trade in accordance with state law and this code.

Exceptions:

1. A property owner may perform work as follows:

- a. A person working on an existing structure on that person's own property, whether occupied by the person or not, and a person working on that person's own existing residence, whether owned by the person or not;
- b. An owner or tenant of commercial property who uses the owner's or tenant's own employees to do maintenance, repair, and alteration work on that property.

D. It shall be unlawful for any person to conduct, carry on or engage in the business of, or act in the capacity of a contractor in a trade covered by this code without first being issued a valid municipal contractor's license, and when required, a certificate of qualification.

- E. An applicant for a building construction contractor's license may be requested to provide a copy of the construction contractor's bond required by state law with the application and shall show proof the bond is current and in effect.
- F. It shall be unlawful for any person to labor in the capacity of a plumber, gas fitter or sheetmetal journeyman without first being issued a valid journeyman certificate of qualification by the Municipality.
- G. Any contractor or journeyman doing gas piping, plumbing or sheet metal work covered by this code shall be tested and licensed by the Municipality.
- H. It shall be unlawful to labor as a plumber or sheet metal trainee without first being issued a valid trainee certificate of qualification by the Municipality.
- I. It shall be unlawful for any person acting in the capacity of a contractor in a trade covered by this code, or as the responsible agent, manager, supervisor, superintendent or foreman, to knowingly or willfully order, instruct or permit an employee, agent or person under supervision or control to do an act violating the certificate of qualification requirements set forth in subsection F. or H.
- J. The ratio of individuals holding sheet metal or plumber trainee certificate of qualification cards shall not be more than two for every certified journeyman on a job site.

23.10.105.2 Certificate of qualification.

23.10.105.2.1 Application for certificate of qualification, gas piping, plumbing and sheet metal.

- A. Every person applying for a gas piping, plumbing or sheet metal contractor certificate of qualification shall complete the application form, pass the required test and pay the required fee. If a certificate is not obtained within 90 days of passing the exam, the applicant may be required to retest.
- B. Every person applying for a gas fitter, plumber or sheet metal journeyman certificate of qualification shall complete the application form, pass the required test and pay the required fee. If a certificate is not obtained within 90 days of passing the exam, the applicant may be required to retest.
- C. Every person applying for a plumber or sheet metal trainee certificate of qualification shall complete the application form and pay the required fee.
- D. In accordance with state law, no person shall qualify as administrator under more than one license. If the relationship of the administrator

with the firm or corporation applicant is terminated, the license shall become void within 60 days unless another administrator is qualified by proper authority. Licenses issued to applicants are nontransferable.

E. Applicants for a plumbing or sheetmetal contractor certificate of qualification shall provide evidence of at least six years or 12,000 hours minimum of previous practical experience. Applicants for a gas piping contractor certificate of qualification shall provide evidence of at least four years or 8,000 hours minimum of previous practical experience. Only hours accrued while properly licensed and working for a legally licensed contractor for the relevant trade will be credited towards the required hours. In lieu of previous practical experience (at the discretion of the Building Board, Mechanical Subcommittee) credit may be allowed for each year, and fraction thereof, of attendance at a recognized school, if the course taken by the applicant was primarily mechanical and directly related to the particular skill or trade being applied for. No credit shall be allowed any applicant for experience gained while doing any mechanical work ordinarily incidental to or associated with non-mechanical occupations, as determined by the Building Official.

F. Applicants for a plumbing contractor or plumber journeyman certificate of qualification shall provide a copy of a current Alaska Department of Labor Certificate of Fitness Plumber Journeyman card. Applicants for a plumber trainee certificate of qualification shall provide a current copy of an Alaska Department of Labor Certificate of Fitness card.

G. Applicants for a plumber or sheet metal journeyman certificate of qualification shall provide evidence of at least four years or 8,000 hours minimum of previous experience personally installing, fabricating, altering and repairing work covered by the particular skill or trade being applied for. Only hours accrued while properly licensed and working for a legally licensed contractor in the relevant trade will be credited towards the required hours. In lieu of previous practical experience, (at the discretion of the Building Board, Mechanical Subcommittee) credit may be allowed for each year, and fraction thereof, of attendance at a recognized school if the course taken by the applicant was primarily mechanical and directly related to the skill or trade being applied for. No credit shall be allowed any applicant for experience gained while doing any work ordinarily incidental to or associated with non-mechanical occupations as determined by the Building Official. In lieu of the above qualifications, an applicant may submit proof of successful completion of at least a four-year or 8,000 hours minimum apprenticeship program registered

and approved by the U. S. Department of Labor, Bureau of
Apprenticeship and Training, as acceptable qualifications.
Journeyman and trainee plumbers shall have a state license.

- H. Applicants for a plumber or sheet metal trainee certificate of qualification are not required to have prior experience but shall provide evidence of working for a properly certified contractor and be enrolled in an approved apprenticeship program.
- I. Applicants for a journeyman gas fitter certificate of qualification shall provide evidence of two years or 4,000 hours minimum previous experience in the gas piping field and shall provide a current copy of an Alaska Department of Labor Certificate of Fitness Gas Fitter card. Only hours accrued while properly licensed and working for a legally licensed contractor in the relevant trade will be credited towards the required hours.

**23.10.105.2.2 Issuance of certificate of qualification, gas piping,
plumbing and sheet metal.**

- A. A sheet metal, plumbing, or gas piping contractor certificate of qualification shall be issued to a person who makes application for such certificate, provides evidence of the required experience and training, successfully passes the examination and pays the required fee.
- B. A sheet metal, plumber, or gas fitter journeyman certificate of qualification shall be issued to a person who makes application for such certificate, provides evidence of the required experience and training, successfully passes the examination, and pays the required fee.
- C. A plumber or sheet metal trainee certificate of qualification shall be issued to a person who meets the application requirements for such certificate and pays the required fee.
- D. Every person required to have a certificate of qualification shall obtain such certificate either:
 - 1. Within 90 days of passing the required test; or
 - 2. Within 30 days of the expiration date shown on the certificate, except if the certificate has been suspended or revoked.
- E. Certificates of qualification issued under this title are valid for a maximum of two years and expire on February 14 of even calendar years.

**23.10.105.2.3 Certificate of qualification, re-examination, gas piping,
plumbing and sheet metal.**

- A. Any person who fails to pass the examination may apply for re-examination on the next available test date.

- B. Fees for re-examination will be the same as initial examination fees.

23.10.105.2.4 Expiration of certificate of qualification, gas piping, plumbing and sheet metal.

- A. Every certificate of qualification shall remain in force and effect until its expiration date, unless canceled or revoked.
- B. Certificates of qualification expired beyond 30 days, but less than two years may be renewed by paying the prescribed fee. This fee shall be retroactive to the expiration date of the last certificate issued. In addition, an administrative late fee shall be charged.
- C. Certificates of qualification expired by two or more years shall not be renewed, and the person shall be required to re-take the test required for new applicants.

23.10.105.2.5 Backflow assembly tester certificate of qualification.

- A. A backflow assembly tester certificate of qualification shall be issued to a person who makes application for such certificate, attends the four-day Backflow Assembly Certification class sponsored by the Municipality, successfully passes both the written and the hands-on examination, and pays the required fee. The certification is valid for three (3) years and may be extended for one additional year with approval of the Building Official. An applicant may submit proof of attendance of a similar class and of successfully passing the required examination(s) of the similar class, provided further the similar class is recognized as equal to the aforesaid requirement(s), as determined by the Building Official.
- B. A person who wishes to maintain a valid certificate of qualification as a Backflow Assembly Tester shall - every three (3) years from the date of original issuance - attend an 8-hour re-certification class administered by the department or a nationally recognized agency approved by the Building Official, successfully pass both written and hands-on examinations and pay the required fee. Individuals recertified by agencies other than the department shall provide proof they have successfully passed the written and hands-on examinations prior to receiving a new Backflow Assembly Tester certificate of qualification.

23.10.105.2.6 Revocation of certificate of qualification.

- A. The Building Official may cancel or revoke any certificate of qualification issued to any person, if such person later shows incompetence or lack of knowledge in matters relevant to such certificate or if such certificate was obtained by fraud. If the certificate of qualification of any person is canceled or revoked, another

certificate shall not be granted to the person within one year after the date of cancellation or revocation.

B. Certificates of qualification are not transferable from one person to another, and the lending of any certificate or the obtaining of permits there under for any other person shall be cause for revocation.

C. The Building Official may require retesting of any certificate of qualification holder if such person shows incompetence or lack of knowledge in matters relevant to such certificate. Failure to pass a retesting shall result in revocation of the certificate. The person may apply for retesting after 30 days have elapsed.

23.10.105.2.7 Right to inspection, certificate of qualification or fitness.

Municipal inspectors may contact any worker performing work for which a certificate of fitness is required (under AS 18.62.010) or a certificate of qualification is required under this code and request the person to exhibit the person's certificate. The inspector may immediately serve upon the person a notice to cease any work in that occupation until a State of Alaska certificate of fitness and/or a municipal certificate of qualification is displayed.

Section 106 Inspection requirements.

23.10.106.1 General.

A. Construction or work for which a permit is required shall be subject to inspection by the Building Official and the construction or work shall remain accessible and exposed for inspection until approved by the Building Official. In addition, certain types of construction shall have special inspection, as specified in Section 106.7, which is a requirement of the owner and paid for by the owner. Note: The special inspector shall not receive compensation from the contractor of record.

B. Approval, as a result of an inspection, shall not be construed as an approval of a violation of the provisions of this code or other ordinances of the Municipality. Inspections presuming to give authority to violate or cancel the provisions of this code or other ordinances shall not be valid.

C. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the Building Official nor the Municipality shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

D. An as-built survey may be required by the Building Official prior to completion of a development to verify a structure is located in

accordance with this code, land use regulations and the approved plans.

- E. The Building Official may require a survey showing as-built contours of a fill or excavation to verify the work conforms to this code, land use regulations and the approved plans.

23.10.106.2 Inspection requests.

- A. It shall be the duty of the person doing the work authorized by the permit to notify the Building Official such work is ready for inspection. The Building Official may require every request for inspection be filed at least one working day before such inspection is desired. Such request may be via Building Safety online services, in writing or by telephone.
- B. It shall be the duty of the person requesting any inspections required either by this code, or the technical codes, to provide safe access to and means for inspection of the work.

23.10.106.3 Approval required.

- A. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the Building Official. The Building Official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction is satisfactory as completed or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. Any portions not in compliance shall be corrected and such portion shall not be covered or concealed until authorized by the Building Official.
- B. There shall be a final inspection and approval for each relevant discipline associated with the permitted building or structure before the building or structure shall be declared completed and ready for occupancy and use.
- C. Retrofit permits are completed and closed when the inspector issues an approved final inspection report. A Certificate of Completion is not required but can be provided upon request.

23.10.106.4 Required inspections.

The Building Official shall publish and keep current an "Inspection Schedule" for required inspections for various types of construction. This schedule shall be available on the department website and by hard copy at the Development Services public counter.

23.10.106.5 Other inspections.

In addition to the inspections specified above, the Building Official may make or require other inspections of construction work to ascertain compliance with the provisions of this code or technical codes and other laws enforced by the code enforcement agency.

23.10.106.6 Re-inspections.

- A. A re-inspection fee may be assessed for each inspection when such portion of work for which the inspection is requested is not complete. Fees shall be in accordance with Table 3-C of this code, including re-inspection fees for subsequent inspections of the same code issue noted in a prior inspection report. This section is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with the requirements of the technical codes, but as controlling the practice of calling for inspections before the job is ready for such inspection or re-inspection.
- B. Re-inspection fees may be assessed when the approved plans are not readily available to the inspector or for failure to provide access on the date inspection is requested.

23.10.106.7 Special inspections and structural observation.

Special inspection and structural observation requirements shall be in accordance with the International Building Code, Chapter 17 and the adopted Special Inspection Program.

Section 107 Certificates of Occupancy and Completion.

23.10.107.1 Use or occupancy.

- A. Units, buildings, or structures shall not be used or occupied nor shall a change in the existing use or occupancy classification of a unit, building, or structure or portion thereof be made until the Building Official issues a Certificate of Occupancy as provided herein.
- B. Issuance of a Certificate of Occupancy shall not be construed as an approval of a violation of the provisions of this code or other ordinances of the Municipality. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinance shall not be valid.

23.10.107.2 Change in use.

Changes in the character or use of a property, parcel, building, or portion thereof shall not be made except as specified in this code.

23.10.107.3 As-built survey.

Unless otherwise approved by the Building Official, an as-built survey shall be provided for new structures, moved structures and additions to existing structures.

23.10.107.4 Certificate of Occupancy (CO) issuance.

- A. After the Building Official and other authorized municipal code enforcement authorities inspect the building, structure and associated land use and find no violations of the provisions of this title or other laws enforced by municipal code enforcement agencies, and upon approval of an as-built survey, the Building Official shall issue a Certificate of Occupancy (CO) containing the following:
1. The building permit number;
 2. The address of the building or unit;
 3. The name and address of the owner;
 4. A description of the portion of the building for which the certificate is issued; and
 5. A statement that the described portion of the building has been inspected for compliance with the requirements of this code for the group and division of occupancy and the use for which the proposed occupancy is classified.

23.10.107.5 Conditional Certificate of Occupancy (CCO) issuance.

- A. If the Building Official finds substantial hazard will not result from occupancy of a building or portion thereof before the same is completed, a Conditional Certificate of Occupancy (CCO) for the use of a portion or portions of a building or structure may be issued prior to the completion of the entire building or structure.
- B. Conditional Certificates of Occupancy for exterior work not completed because of weather shall have an expiration date of September 15 of the following year.
- C. Expired conditional certificates may prevent the same permittee or contractor from receiving additional permits as outlined in this code.

23.10.107.6 Certificate of Completion (COC).

A Certificate of Completion (COC) may be issued in lieu of a certificate of occupancy for permits that do not involve the construction of occupiable space or a change in occupancy classification, including but not limited to retrofit, reroof, repair, renovation, sign, grading/excavation/fill, elevator and fire system permits.

23.10.107.7 Failure to obtain a Certificate of Occupancy.

In addition to other penalties and remedies prescribed by this code, the Building Official may file in the Anchorage District Recorder's Office a certificate describing the property and noncompliance with this code. Failure to obtain a Certificate of Occupancy includes, but is not limited to, the following:

- A. A Conditional Certificate of Occupancy that is expired by more than 180 days; or
- B. A permit under which work has been performed that is expired by more than 180 days; or
- C. Work regulated by this code performed without obtaining the required permit(s).

The responsibility and cost to remedy any conditions necessary to achieve compliance with this code shall not be borne by the Municipality.

23.10.107.8 Fees.

All permit fees, application fees, and all other associated fees and fines shall be paid prior to permit issuance. Any fees or fines applicable after permit issuance shall be paid prior to obtaining a Certificate of Occupancy, Conditional Certificate of Occupancy or a Certificate of Completion.

23.10.107.9 Revocation.

The Building Official may, in writing, suspend or revoke a Certificate of Occupancy or Conditional Certificate of Occupancy issued under the provisions of this title when the certificate is issued in error, or on the basis of incorrect information, or when it is determined the building, structure, land use or portion thereof is in violation of an ordinance, regulation or the provisions of municipal code or state law.

Section 108 Unsafe buildings, structures, and building service equipment.

23.10.108.1 General.

See chapter 23.70, Abatement of Dangerous Buildings Code.

Section 109 Fines and Fees Tables.

23.10.109 Table 3-A Building/Structure permit fees.

	Building Safety Fee	Inspections included with permit*
1. Commercial Construction (new construction, additions, alterations and repairs)		

Up to \$50,000 (Repairs, decks, and minor alterations only)	\$350	4 inspections
Up to \$1,000,000	\$0.012 * (Valuation), minimum \$700.	30 inspections plus 5 additional for every \$100,000 in valuation.
Over \$1,000,000 to \$5,000,000	\$12,000 + \$0.008 * (Valuation over \$1,000,000)	80 inspections plus 5 additional for every \$250,000 in valuation over \$1,000,000.
Over \$5,000,000	\$44,000 + \$0.006 * (Valuation over \$5,000,000)	160 inspections total plus 5 additional for every \$500,000 in valuation over \$5,000,000.
Affordable housing when 50% or more of the residential units constructed/renovated will be rented to households earning 80% or less of the Housing and Urban Development (HUD's) median household income for the Anchorage area.	25% of the applicable <u>Commercial Building Safety Fee</u>	Same as standard <u>Commercial Construction</u> .
2. Residential Construction (new construction, additions, alterations, and repairs)		
Up to \$50,000 (Repairs, decks, and minor alterations only)	\$350	4 inspections
All others	\$0.009 * (Valuation), minimum \$450	23 inspections plus 2 additional inspections for every \$100,000 in valuation.
3. Miscellaneous Building Permits		
A. Trade Permits (Plumbing, mechanical, or electrical work but no structural or alteration work)	\$175	2 inspections
B. Temporary/seasonal building (new)	\$1,200	2 inspections

C. Temporary/seasonal building (extension/yearly renewal)	\$600	2 inspections
D. Change of Use (no alteration included)	\$350	2 inspections
E. Demolition	\$175	1 inspection
F. Relocatable set-up permits	\$350	3 inspections
G. Mobile vendor [food] unit	\$350	3 inspections
4. Digital maintenance fees (Nonrefundable)		
A. Commercial Construction Permits (per item 1)	\$75	
B. Residential Construction Permits (per item 2)	\$50	
C. Clearing and Grading Permits per AMC 23.10.109.Table 3-G when not included with item 1 or 2 above	\$25	
C. Miscellaneous Building Permits (per item 3)	\$15	
D. Other types of permits	No fee, reserved	

*Inspections listed here do not include zoning or private development inspections which are charged separately on a per inspection basis where required. Inspections required beyond those included are charged on a per inspection basis; see Table 3-C.

23.10.109 Table 3-B Plan review fees.

Review Types	Commercial	Residential (Triplex or Less)
(1) Building Plan Review		
A. Regular Plan Review	0.0031 *(Valuation), minimum \$75	0.005 *(Valuation), minimum \$75
B. Repair Only with Valuation up to \$50,000 (does not include minor alterations or decks)	50% of Item (1)A, minimum \$75	50% of Item (1)A, minimum \$75
C. Pre-approved plan review for new buildings	50% of Item (1)A., minimum \$75	50% of Item (1)A., minimum \$75

1
2
3

D. Optional plan review by approved third-party reviewing professionals		75% of Item (1)A., minimum \$75	75% of Item (1)A., minimum \$75
(2) Land Use Plan Review		15% of the Building Safety fee under Table 3-A, minimum \$75	15% of the Building Safety fee under Table 3-A, minimum \$75
(3) Fire Department Plan Review		\$0.0011 * (Valuation), minimum \$75	(Optional for Wildland Urban Interface only): \$0.002 * (Valuation), minimum \$75
(4) PD-Civil Plan Review		2.5% of the Building Safety fee with a minimum of \$75	N/A
(5) Traffic Department Plan Review		2.5% of the Building Safety fee under Table 3-A, minimum \$75	N/A
(6) Addressing Plan Review		Per AMCR 21.20	Per AMCR 21.20
(7) Flood Hazard Plan Review		Per AMCR 21.60	Per AMCR 21.60
(8) Stormwater Review		Per AMCR 21.67	Per AMCR 21.67
(9) Relocatable Classroom Set-Up Review Fee		\$75 per discipline	N/A
(10) Mobile <u>Vendor</u> <u>[Food]</u> Unit Review Fee		\$75 per discipline	N/A
(11) Miscellaneous Review Fees			
A. Expedited Plan Review	Initial permit	Base Plan Review Fee plus 60% of the Building Safety fee under Table 3-A	
	Change Orders	\$280 per hour per discipline with a quarter hour minimum per discipline	
B. Express Plan Review (In addition to other plan review fees)		\$280 per hour per discipline with a half hour minimum per discipline	
C. Code research, change orders, alternate materials and methods requests, product/fabricator review, misc. review.		\$175 per plan review discipline per hour with a quarter hour minimum per discipline	

23.10.109 Table 3-C Inspection fees.

1. Inspection or first re-inspection for any not already covered by a permitting fee(such as inspections in excess of allotted quantity).	\$175 per hour, minimum 1 hour
2. Second and subsequent re-inspections of same code correction issue. Such inspections are not covered by permitting fee. The second and subsequent reinspection fee shall not apply if requested with an inspection to inspect additional work in the same trade and the newly inspected work is ready for and passes inspection.	\$265 per hour, minimum 1 hour (First re-inspection at no additional cost)
3. Inspection or re-inspection, unscheduled. Unscheduled inspections are not covered by the permitting fees.	\$350 per hour, minimum 1 hour
4. Inspection or re-inspection, outside normal business hours. Inspections outside of normal hours are not covered by the permitting fee.	\$350 per hour, minimum 2 hour
5. Inspection, Sundays and holidays. Inspections on Sundays or holidays are not covered by the permitting fees.	\$400 per hour, minimum 2 hours
6. Code compliance inspection.	\$175 per hour (minimum 2 hour), per inspector
7. Secure Facilities Surcharge (in addition to the applicable inspection fee(s) at any facility where an inspector must wait for an escort).	25% Surcharge

23.10.109 Table 3-D Temporary electric and gas permit fees.

1. Temporary Electric, without building permit. No fee if tied to a building permit.*	Per inspection, see Table 3-C
2. Temporary gas, without building permit. No fee if tied to a building permit.*	Per inspection, see Table 3-C

* Temporary gas and electric fees apply to demolition permits.

23.10.109 Table 3-E Retrofit permit fees.

Scope Description	Fee and Inspections Included*
1. Retrofit permits limited in scope as follows:	

A. One new 20 amp circuit having no more than six general purpose receptacles or light fixtures.	\$175, 2 inspections
B. No more than six general purpose receptacles or light fixtures added to one or more existing 20 ampere circuits.	\$175, 2 inspections
C. One 20 amp circuit for a sign.	\$175, 2 inspections
D. The like for like replacement of a water heater in a residential building containing 4 or fewer dwelling units.	\$175, 2 inspections
2. Retrofit permits limited in scope as follows that do not qualify under item 1. above:	
A. The like for like replacement of plumbing, mechanical and electrical equipment, fixtures and appliances in commercial and residential buildings.	\$175, 2 inspections
B. The like for like replacement of a water heater in a commercial building or a residential building containing more than 4 dwelling units.	\$175, 2 inspections
C. Electrical, plumbing or mechanical alterations to a residential building containing 4 or fewer dwelling units.	\$175, 2 inspections
D. Minor plumbing, mechanical and electrical alterations to commercial buildings where the requirement for engineering can be waived (requires pre-approval by plan review).	Per inspection, see Table 3-C
3. Test backflow preventer	\$175, 1 inspection
4. Fire Retrofit Permits - see Table 3-M	

*Inspections required beyond those included are charged on a per inspection basis; see Table 3-C.

23.10.109 Table 3-F Elevator, escalator, dumbwaiter, and other lift permit fees.

NOTES:

- Each separately powered unit shall be considered a separate conveyance; applications and permits shall be issued accordingly.
- Load side wiring associated with the conveyance and installed by the elevator contractor shall not require additional permits.
- Fees include elevator inspection section plan review time, travel time, inspection time, report preparation time and administrative time.
- Elevator inspector time is billed in hour increments.

1. New Installations, Modernizations and Relocations	
A. Hydraulic elevators	\$2,400
B. Electric geared and gearless elevators	\$3,090
C. Residential elevators	\$2,060

D. Dumbwaiters	\$1,375
E. Escalators and moving walks	\$3,090
F. Accessibility Equipment covered by A18.1:	
1. Vertical Platform Lift	\$1,375
2. Inclined Platform Lift	\$1,030
3. Inclined Stairway Chairlifts	\$340
Accessibility equipment installed in a single-family home, duplex, or triplex	Permitting fee shall be reduced by fifty percent (50%)
G. Vertical Reciprocating Conveyor (VRC)	\$1,375
H. Roped hydraulic elevators	\$2,750
2. Minor Alterations	
Building Safety will use 3 hours as the base amount to charge at the time of application. Additional time required to complete the project will be billed at the end of the project.	\$525 base plus \$175 per hour for inspector time beyond 3 hours
3. Biennial Certificate of Inspection	
A. Electric geared and gearless elevators	\$1,030 base plus \$175 per hour for inspector time exceeding 8 hours.
B. Hydraulic elevators	\$690 base plus \$175 per hour for inspector time exceeding 5 hours.
C. Accessibility Equipment covered in the A18.1	
1. Vertical platform lift	\$350 base plus \$175 per hour for inspector time exceeding 2 hours.
2. Inclined platform lift	\$350 base plus \$175 per hour for inspector time exceeding 2 hours.
3. Inclined stairway chair lift	\$175 base plus \$175 per hour for inspector time exceeding 1 hour.
D. Dumbwaiters	\$525 base plus \$175 per hour for inspector time exceeding 4 hours.
E. Vertical Reciprocating Conveyor (VRC)	\$525 base plus \$175 per hour for inspector time exceeding 4 hours.
4. Annual certificate of Inspection	
Escalators and moving walks	\$1,200 base plus \$175 per hour for inspector time exceeding 9 hours.

5. Temporary Use	
All temporary use certificates	\$250 for 30-day certificate, must be renewed every 30 days as required
6. Duplicate Elevator Certificate	\$35 per certificate

23.10.109 Table 3-G Grading and Clearing Permits.

1. There is no additional permit fee when grading is done as part of a residential building permit for single family, duplex or triplex.	
2. Building Safety Fees are required for stand-alone grading permits and commercial building permits with grading scope as follows:	
A. 1 to 50 cubic yards	\$87.50
B. 51 to 5,000 cubic yards	\$625
C. 5,001 to 100,000 cubic yards	\$1,140
D. Over 100,000 cubic yards	\$2,100
3. Plan review fees are required for grading work as follows (standalone only):	
A. 1 to 50 cubic yards	\$87.50
B. 51 to 5,000 cubic yards	\$625
C. 5,001 to 100,000 cubic yards	\$1,140
D. Over 100,000 cubic yards	\$2,100
4. Fire Plan Review (if Applicable, standalone only)	\$75
5. Stormwater Review (standalone only)	Per AMCR 21.67
6. Stormwater Inspection (NPDES, standalone only)	Per AMCR 21.67
7. Clearing Only Permit, greater than 1 acre (No Grubbing/Ground disturbance)	\$175.00 Permit Fee \$75.00 Zoning Plan Review Fee (Land Use)
8. Clearing & Grubbing Permits	\$175.00 Permit Fee \$75.00 Zoning Plan Review Fee \$45.00 Flood Plan Review Stormwater Review & Inspection Fees to be applied

23.10.109 Table 3-H Residential and Commercial Re-roof permit fees.

Residential Re-Roofing Permitting Fees (One, Two and Three Family Structures)	
1. Up to 3,000 sq. ft.	\$350
2. Greater than 3,000 sq. ft.	\$525
Commercial Re-Roofing Permitting Fees (fees also cover plan review services)	

1. Up to 1,500 sq. ft.	\$525
2. 1,500 to 3,000 sq. ft.	\$700
3. Greater than 3,000 sq. ft.	\$1050

23.10.109 Table 3-I Manufactured (mobile, HUD) home set-up permit fees.

1. Permit, Mobile Home Setup	\$175
2. Land use plan review fee	\$45
3. Plumbing Inspection	\$87.50 per inspection
4. Electrical Inspection	\$87.50 per inspection

23.10.109 Table 3-J Sign and Artwork permit fees.

1. Sign/art permit fee - all signs/art require zoning and structural inspections; electrical signs/art also require an electrical inspection.	\$175 per inspection
2. Sign/art plan review fee - land use, structural and electrical review as applicable.	\$175 per hour (half hour minimum per discipline)

23.10.109 Table 3-K Licenses and testing fees.

1. Test Fees	
A. Contractor testing fee	\$100
B. Journeyman testing fee	\$75
2. Issuance or Renewal Fees	
A. Contractor license, 2 years	\$400
B. Contractor license w/ Residential Endorsement, 2 years	\$450
C. Journeyman license, 2 years	\$150
D. Trainee license, 2 years	\$85
E. Special Inspector License, 2 years	\$150
F. Administrative late fee	\$70
3. License Requirements	
Backflow Assembly Tester, renewal fee (one-day recertification training required)	\$150
4. Duplicate License Fee	\$25

23.10.109 Table 3-L On-site service fees.

1. Certificate of on-site systems approval, (COSA) single family	
A. Existing System	\$600
B. Existing System with active upgrade permit	\$340
C. Well-only	\$340

D. New Installation	\$90
2. On-site conditional COSA approval	\$350
3. On-site wastewater disposal system construction permit, includes drain field replacement	\$715
4. Water well construction permit	\$270
5. Septic tank/Holding tank replacement	\$270
6. Water storage tank permit	\$200
7. Renewal for on-site permit or COSA	\$175
8. On-site water/wastewater expedited review	Additional 60% of the applicable fees
9. On-site wastewater permit change order review, per hour, half-hour minimum	\$175
10. On-site code compliance re-inspection, per inspection, per hour, one hour minimum	\$175
11. Separation distance variance/waivers:	
A. Variance/Waiver, lot line	\$270
B. Variance/Waiver, well to tank	\$1,200
C. Variance/Waiver, well to field	\$1,200
D. Variance/Waiver, other code waiver requests	\$175 per hour
12. Excavator certification	\$125
13. Well driller and pump installer certification	\$125
14. Wastewater treatment equipment review and facility inspection for product approval.	\$175 per hour

23.10.109 Table 3-M Fire systems permit fees.

1. Combined Plan Review and Permitting Fees	
A. Access Control System (Permit required if system delays egress or electronically locks egress doors)	\$450
B. Energy system - if legally required by IFC section 1203.2	\$2,100
C. Special Hazard Fire System (CO2, clean agent, halon, halon alternatives, or dry chemical system)	\$700
D. Fire Pump	\$700
E. Fire Sprinkler/Alarm/Foam-water Sprinklers	
0—25 devices	\$450
26—50 devices	\$575
51—75 devices	\$700
76—100 devices	\$825
Each lot of 50 devices beyond 100	\$450
F. Fire Standpipe System	\$875

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G. Fire protection or life safety system not otherwise listed (reviewed and inspected per hour) (Some examples are low- and high-expansion foam systems or water spray fixed systems)	\$175 per hour, minimum \$450 charge
H. Gas Detection System	\$450
I. Kitchen Hood Fire System	\$450
J. Digital Alarm Communicator System, Radio System, or other equipment installation for transmission of Off-Premises Signals to a location providing supervising station service. (Fee applies if installing or modifying monitoring equipment for an existing fire or life safety system. If installed as part of a new system installation, fee does not apply.)	\$275
K. Smoke Control or Smoke Exhaust System	\$2,100
L. Demo Permit for a Fire or Life Safety System	\$175
M. Beverage CO2 gas detection	\$275
2. Change Order	\$175 per hour, min half hour per discipline
3. Retrofit to a Fire or Life Safety System (Limited to fire alarm, fire sprinkler, and kitchen fire systems under International Fire Code Section 105.7.28.2.4.14 and must be replacing an existing system with a like system of similar capacity/functionality)	\$275

23.10.109 Table 3-N Miscellaneous fees.

1. Code books and publications	at cost + 10% Admin processing fee w/ \$5.00 minimum fee
2. Records research and retrieval	\$75 per hour for staff time plus actual box/archive retrieval fees
3. Recording documents on behalf of customers with State of Alaska's District Recorder's Office	\$45 for staff time plus actual recording fees
4. Copies, each	\$0.35 (8 ½" x 11" letter) \$0.45 (8 ½" x 14" legal) \$0.55 (11" x 17" tabloid) \$5.00 (24" x 36" ARCH D) \$6.00 (36"x 48" ARCH E)
5. MOA issued USB flash storage drive, each	\$10.00 (32 GB) \$20.00 (64 GB) \$30.00 (128 GB)
6. Training, per person, per class, when applicable	\$60
7. Code abatement fee	\$175 , per inspector, per hour, w/ two hour minimum

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8. Permit Reactivation Fee (includes evaluation)	\$175 + applicable fees for inspections
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23.10.109 Table 3-O Fines.

1. Fine, building code violation, civil penalty	
Residential	\$100 to \$500 per day per violation
Commercial	\$500 to \$1000 per day per violation
Dangerous Building	\$500 to \$1000 per day per violation
2. Fine for failure to perform required special inspection	\$425 per incident
3. Investigation fee and fine for work begun without proper permit(s), in addition to all permit fees required by this code.	
a. First Offense: \$1,000 investigation fee. The fee may be waived by the Building Official if required permit is obtained within reasonable amount of time agreed to by Building Official.	
b. Subsequent Offenses: \$1,000 investigative fee plus a \$1,000 fine applied incrementally for each additional offense occurring within five years of the original offense. Example: The third offense would be \$3,000 (\$1,000 investigative fee plus \$2,000 fine).	
4. Fine (Contractor), working without a required contractor's license:	
a. First Offense: \$1,000 fine which may be waived by the Building Official if required license is obtained within 30 days.	
b. Subsequent Offense: \$1,000 fine and an additional \$1,000 applied incrementally for each additional offense occurring within five years of original offense. Example: The third offense within 5 years would be a \$3,000 fine.	
5. Fine (Journeyman/apprentice), working without a required Certificate of Qualification:	
a. First Offense: \$250 fine (which may be waived by the Building Official if the individual registers for the journeyman test within 72 hours).	
b. Subsequent Offense: \$250 fine and an additional \$250 applied incrementally for each additional offense occurring within five years of original offense. Example: A third offense within 5 years would be a \$750 fine.	
c. The contractor for whom the violator is working shall be subject to the same fine as the violator.	
6. Fine, failure to obtain a certificate of completion prior to expiration for a fire systems permit:	
Fine for the failure to obtain a certificate of completion for a system regulated by the International Fire Code, Section 105.7, prior to expiration of the permit	

shall be \$1,000. An additional fine of \$2,500 shall apply if the permit is not closed-out within 2 years. Additional fines shall apply at the rate of \$5,000 per year for a third and each subsequent year.

Section 4. Anchorage Municipal Code Chapter 23.15 is hereby repealed in its entirety and replaced with the following:

Chapter 23.15 LOCAL AMENDMENTS TO THE INTERNATIONAL BUILDING CODE

23.15.100 Local amendments to the International Building Code.

The amendments to 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.

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 A117.1-2017, section 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.

23.15.420 Groups I-1, R-1, R-2, R-3, and R-4.

Amend Section 420.1 by replacing reference to "420.11" with "420.12."

Add subsection 420.12 as follows:

420.12 Single Exit Buildings with Group R-2 Occupancies.

Notwithstanding Section 1006.3.3, stories containing Group R-2 occupancy are permitted to be served by a single exit where in compliance with the provisions of sections 420.12.1 through 420.12.3 as applicable.

420.12.1 General requirements. Each story of Group R-2 occupancy is permitted to be served by a single exit provided all the following criteria are met:

1. The building shall be located within the Anchorage Building Safety Service Area.
2. The building shall be not more than six stories, including basements.

- a. Roofs shall be used for maintenance only and shall not be occupiable.
- b. The **building height [highest occupiable floor]** shall not exceed 75 feet **[above the lowest level of fire department vehicle access]**.
3. Each Group R-2 story shall be limited to four dwelling units (apartments). Other R-2 uses are not allowed.
- 4. The building shall be of Type I or Type II construction.**
Exception: The building may be of Type III-A, Type IV, or Type V-A construction provided the net floor area does not exceed 4,000 square feet per floor.
- 5.[4.]** The exit access travel distance shall not exceed 125 feet.
- 6. A corridor shall separate each dwelling unit entry/exit door from the door to an interior exit stairway.**
 - a. **The distance from the unit door to the interior exit stairway door shall not exceed 20 feet.**
 - b. **Dwelling unit doors shall not open directly into an interior exit stairway.**
- 7.[5.]** The minimum stairway width shall be 44 inches.
- 8.[6.]** Interior exit stairways serving more than 4 stories shall be protected with smokeproof enclosures constructed in accordance with Section 909.20.
- 9.[7.]** There shall be no openings within 10 feet of unprotected openings in the stairway enclosure. The required exit doors having a minimum one-hour fire-resistance rating shall be considered protected for the intent of this provision.
- 10.[8.]** Electrical receptacles located in an interior exit stairway shall be prohibited.

420.12.2 Fire protection requirements. All buildings with one or more stories of Group R-2 occupancy served by a single exit shall provide the following:

1. An approved water source capable of supplying the required fire flow for protection in compliance with IFC Section 507.
Exceptions as listed in AMC 23.45.507.1 for areas of the jurisdiction not served by a water utility shall not be applied.
2. Throughout the entire building, an automatic sprinkler system in compliance with Section 903.3.1.1.
 - a. Omission of sprinkler locations in accordance with NFPA 13 shall not be permitted.
 - b. Interior exit stairways shall be protected in accordance with NFPA 13 for combustible stairs regardless of the stairway construction.

- c. Decks, porches, and balconies shall be protected in accordance with NFPA 13 regardless of construction type.
3. Throughout the entire building, a manual fire alarm system with automatic smoke detection that activates the occupant notification system in accordance with Section 907.5.
4. Smoke detectors in common spaces outside dwelling units, including but not limited to gathering areas, laundry rooms, mechanical equipment rooms, storage rooms, interior corridors, interior exit stairways, and exit passageways.
5. Automatic smoke detection listed to UL 268 shall be used within the dwelling units and shall be connected to the building fire alarm in accordance with 907.2.11.7 to satisfy the requirements of 907.2.11.2 for single- and multi-station smoke alarms.

420.12.3 Mixed occupancy requirements. Mixed occupancy shall be permitted within buildings with stories of Group R-2 occupancy served by a single stair, provided all the following criteria are met:

1. Other occupancies shall be separated from the Group R-2 occupancy with a minimum 2-hour fire separation in compliance with 707 and 711. Exemptions in Section 711.2.3 are not permitted.
2. Other occupancies shall comply with all provisions of this code, including those of 1006.3.3.
3. Other occupancies shall not communicate with the Group R-2 occupancy portion of the building or with the single-exit stairway that serves them.

Exception: Parking garages accessory to the Group R occupancy are permitted to communicate with the exit stairway.

4. The exit serving the R-2 occupancy shall not discharge through any other occupancy, including an accessory parking garage.
5. Automatic smoke detection installed outside the Group R-2 occupancies shall utilize multi-criteria smoke detection listed in accordance with UL 268, UL 521, and UL 2075.

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 $\frac{1}{2}$ 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."

23.15.901.6.2 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:

23.15.903.2.8.4 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 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.

23.15.903.3.1.3 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.

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.

23.15.903.3.10 Seismic Design.

Add a new Section 903.3.9 as follows:

903.3.10 Seismic Design. Fire sprinkler systems shall have a minimum seismic design coefficient C_p 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.

Replace reference to "907.2.23" with "907.2.24".

23.15.907.2.1 Group A.

Delete Exception 1.

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:

907.5.2.1.4 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"

23.15.Table 1006.3.4(1) Stories and Occupiable Roofs with One Exit or Access to One Exit for R-2 Occupancies.

Add footnote d. as follows:

- d. For R-2 occupancies with 4 dwelling units per floor up to a maximum of 6 floors, see AMC 23.15.420.12.**

23.15.1007.1.2 Three or more exits or exit access doorways.

Add the following sentence after the first sentence:

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.

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 than 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.

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:

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.

23.15.1112.1 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.

23.15.1212 Moisture control in insulated assemblies.

Amend Chapter 12 by adding the following section:

SECTION 1212

MOISTURE CONTROL IN INSULATED ASSEMBLIES

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

1 comply with section 1210.1.1. Should insulated assemblies become wet or
2 start out wet, the design strategy shall allow the assembly to dry to either
3 the exterior or interior. Materials shall be allowed to dry prior to enclosure.

4 **1212.1.1 Interior moisture control in insulated assemblies.**

5 Methods to control moisture accumulation within insulated assemblies
6 from the building interior shall address both vapor diffusion and air
7 leakage. Ventilated attics and enclosed rafter spaces shall be
8 separated from the interior (conditioned portion) of the building by a
9 Class I vapor retarder. Unvented attics and enclosed rafter assemblies
10 shall comply with section 1202.3. Vapor diffusion through wall
11 assemblies shall be controlled in accordance with Section 1404.3. A
12 vapor retarder shall be continuous, and penetrations and seams shall
13 be sealed with approved tape or sealant to control air leakage.

14 **Exceptions:**

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

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

- 36 4. A vapor retarder is not required at cantilevered floor assemblies
37 where the floor decking consists of nominal ¾ inch OSB or other
38 approved material having a perm rating of less than one. Joints
39 shall be sealed in an approved manner. Joint sealing is not
40 required where the deck is covered with concrete or a gypsum-
41 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.

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.

23.15.1508.3 Vapor retarders.

Amend section 1508 by adding the following subsection:

1508.3 Vapor retarders. Refer to section 23.15.1210.

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.

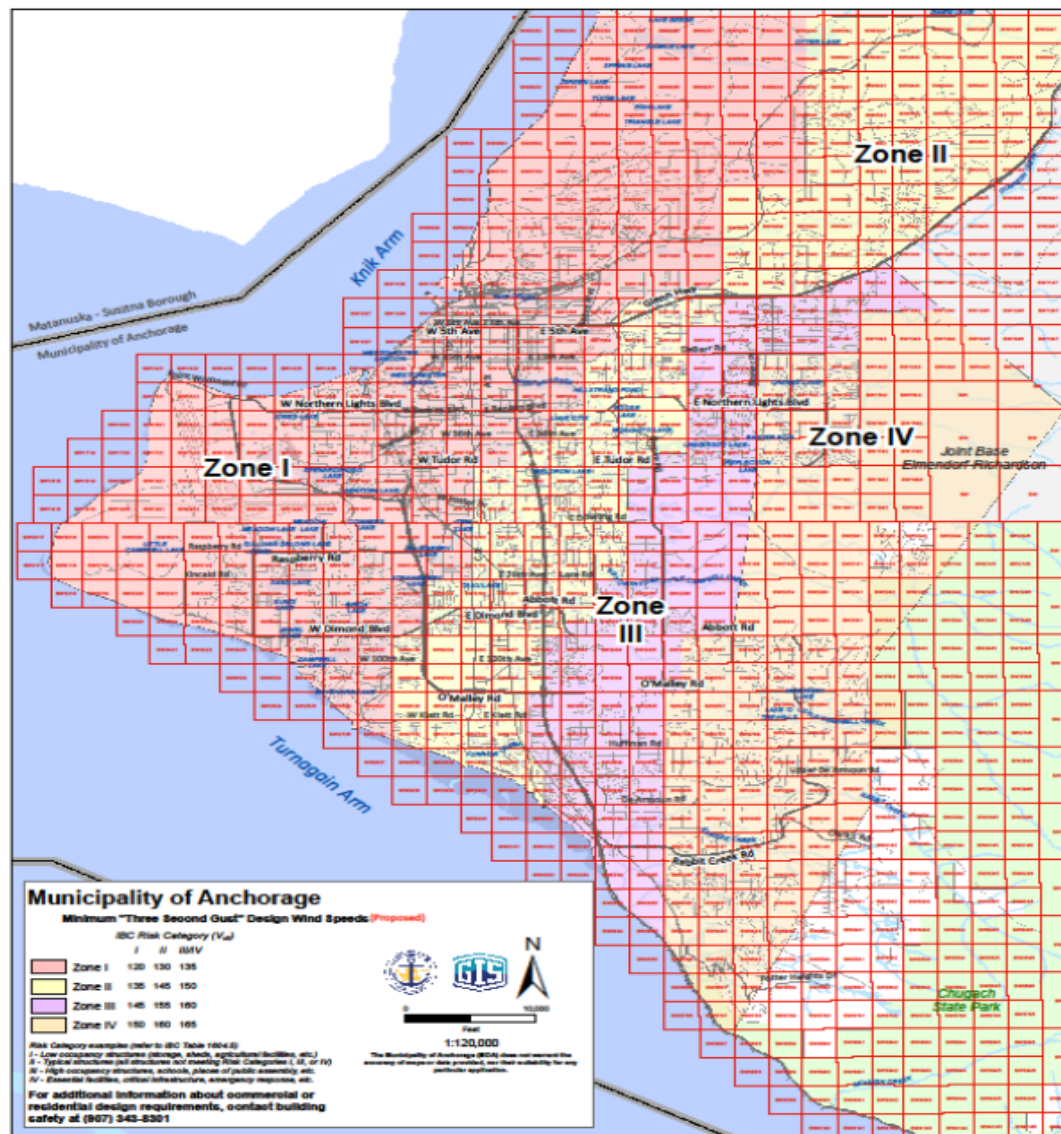
23.15.1609.3 Basic design wind speed.

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 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.

23.15.1611.4 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).

23.15.1613.7 Modifications to ASCE 7.

Amend section 1613 by adding the following subsection:

1613.7 Modifications to ASCE 7

1613.7.1 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 seismic mass of the mezzanines does not exceed 25% of the total seismic mass of the structure shall be permitted.

1613.7.2 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.)..."

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.

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 $R_u \leq 0.5\phi R_n$ for LRFD or $R_a \leq 0.5R_n/\Omega$ 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.

23.15.1705.3 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 $R_u \leq 0.5\phi R_n$ for LRFD or $R_a \leq 0.5 R_n/\Omega$ 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.

23.15.1705.5.4 Small wood buildings.

Amend section 1705.5 by adding the following subsection:

23.15.1705.5.4 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, it shall be specifically stated on the approved drawings.

23.15. Table 1705.7.

Add line item 8 as follows:

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

23.15.1705.21 Post-installed concrete and masonry anchors.

Add the following section:

1705.21 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. Adhesive anchors are not installed horizontally or upwardly inclined to resist sustained tension loads. Adhesive anchors in other orientations or mechanical anchors are not limited.
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 (I_p) 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.

23.15.1803.5.12 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. 1.50 under static and pre-earthquake loading conditions,
 - b. 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 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 Chapter 21 of ASCE 7, with the maximum considered earthquake (MCE).

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

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

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 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.

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.

23.15.2002.2 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 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 $\frac{1}{2}$ 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 $\frac{1}{2}$ 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 $\frac{1}{2}$ inch from the inside face of the rim joist for shear walls constructed on top of platform framed floors.

23.15.2308.9.8 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 Communication Systems.

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.

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.

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

23.15 Chapter 35 Referenced Standards.

Amend the Reference Standards as follows:

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

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

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

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

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

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

23.15 Appendices.

Adopt Appendices as listed in AMC 23.05.010. Local amendments to appendices as follows.

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.

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.

Section 5. Anchorage Municipal Code Chapter 23.20 is hereby repealed in its entirety and replaced with the following:

Chapter 23.20 LOCAL AMENDMENTS TO THE INTERNATIONAL MECHANICAL CODE

23.20.100 Local amendments to the International Mechanical Code.

The amendments to the International Mechanical Code (IMC) 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.

23.20.101.2 Scope.

Delete the exception.

23.20.103—23.20.115.

Delete sections 103 through 115. Refer to the Anchorage Administrative Code.

23.20.302.6 Roof penetrations.

Add Section as follows:

302.6 Roof penetrations. For roof construction, including those regulated by the IRC:

1. All roof penetrations, excluding attic ventilation, shall be located a minimum of six feet from valley centerline and four feet from the exterior wall line measured on a horizontal plane.

23.20.303.4.1 Appliances subject to vehicle access.

Add Section as follows:

303.4.1 Appliances subject to vehicle impact. Appliances, including their associated piping and ductwork, subject to vehicle impact shall be protected by one or more of the following methods:

1. Install the appliance on a platform a minimum of 24 inches high. The appliance shall not extend beyond the face of the platform. Piping and ductwork shall not be surface mounted to the platform in a location subject to vehicle impact.
2. Protect the appliance with a barrier. The barrier shall be a minimum of 30" high and be constructed of a minimum 2" diameter schedule 40 steel pipe. The barrier must have a minimum 6"

setback from the platform or appliance. The maximum unprotected distance shall not exceed five (5) feet. The barrier shall be installed per one of the following methods:

- a. Buried a minimum of 2'0" deep in compacted soil and imbedded in concrete slab.
 - b. Set in a minimum 1'0" x 1'0" square by 1'0" deep block of concrete (slab not included).
 - c. Secured to the wood framed garage floor with flange and stainless-steel bolts and imbedded in concrete slab.
 - d. Secured to the concrete slab using a floor flange with a minimum of four $\frac{3}{8}$ " diameter by 3½" long galvanized or stainless anchor bolts.
3. Mount appliance and associated piping and ductwork to wall and/or suspend from the ceiling in a location clear of any potential vehicle interference.

In all cases the minimum clear width and depth of the garage shall be maintained in accordance with Title 21.

23.20.304.3 Elevation of ignition source.

Add the following to the end of the paragraph:

Rooms and spaces that are not part of the living space of a dwelling unit shall include but are not limited to utility, storage, mud, laundry, toilet and bathing rooms.

Group F, M and S occupancies with open spaces less than 5,000 square feet that include overhead doors providing access to vehicles and equipment containing combustible fuel shall comply with this section.

Communicating spaces separated by a door are not considered part of this space.

Delete the exception to 304.3.

23.20.304.11 Guards.

Replace the exception with the following:

Exception: Guards are not required where allowed by IBC 1015.6 or 1015.7.

23.20.304.13 Aircraft hangars.

Add Section as follows:

304.13 Aircraft hangars. Overhead appliances installed in aircraft storage areas shall be located at least 10' vertically above the upper surface of the wings or engine enclosure of the tallest aircraft which may be housed in the hangar.

Exception. Where a 10' vertical separation cannot be maintained in an NFPA 409 Class III hangar, a sealed combustion appliance may

be used. The appliance shall be located as high and as far away from the wings and engine enclosure as possible. This exception shall not apply to NFPA 409 Class I and Class II hangars.

23.20.306.4 Appliances under floors.

Add the following sentence at the beginning of this section:

Installation of fuel burning appliances in under-floor crawl spaces is prohibited unless prior written approval is obtained from the authority having jurisdiction.

Add exception #3 as follows:

3. Direct vent appliances can be installed as long as no water or sign of water is present and the installation is in accordance with IMC 304.10.

23.20.306.5 Equipment and appliances on roofs or elevated structures.

Add the following sentence to the end of the first paragraph:

An exterior means of access may only be used for heights 20 feet or less above grade.

At the end of design criteria #2 add the following sentence:

The bottom rung of the ladder shall be located within 14 inches of the floor or grade.

23.20.306.6 Mezzanines and Platforms.

Add Section as follows:

306.6 Mezzanines and platforms. Every mezzanine or platform containing appliances or equipment requiring access more than ten feet, six inches above the ground or floor level shall be made accessible by a stairway or ladder fastened to the structure. The ladder shall be constructed in accordance with the provisions in section 306.5.

23.20.307.3 Condensate pumps.

Add to the end of the paragraph:

This paragraph does not apply to residential applications.

23.20.401.2 Ventilation required.

Add to the end of the section: "Nail salon ventilation shall be in accordance with Table 403.3.1.1."

23.20.401.4.1 Mechanical intake openings serving dwelling units.

Add Section as follows:

401.4.1 Mechanical intake openings serving dwelling units. Mechanical outdoor air intake openings serving dwelling units shall be located a minimum of 6-feet horizontally from a gas pressure regulator relief vent

outlet. Where a vent outlet is located within 6-feet horizontally of a mechanical outdoor intake opening, such opening shall be located a minimum of 2-feet below the vent outlet. Measurements shall be taken from the gas pressure regulator relief vent outlet.

**23.20. Table 401.5 Opening Sizes in Louvers, Grilles and Screens
Protecting Air Intake Openings.**

Revise Table 401.5 as follows:

OUTDOOR OPENING TYPE	MINIMUM AND MAXIMUM OPENING SIZES IN LOUVERS, GRILLES AND SCREENS MEASURED IN ANY DIRECTION
Intake openings in residential occupancies	½ inch
Intake openings in other than residential occupancies	Not < ½ inch and not > 1 inch

23.20.403.0 Compliance Options

Add the following at the beginning of this section:

Mechanical ventilation shall be designed and installed in accordance with this section or, as applicable, with ASHRAE 62.1-2022 "Ventilation and Acceptable Indoor Air Quality" or ASHRAE 62.2-2022 "Ventilation and Acceptable Indoor Air in Residential Buildings".

23.20. Table 403.3.1.1.1.2 Zone air distribution effectiveness.

In the last row of the table, replace the words "near to" with "within 4-feet of".

23.20.501.3 Exhaust discharge.

Delete Exception #1.

23.20.501.3.2 Exhaust opening protection.

Delete the words "¼ inch (6.4mm) and not larger than".

23.20.504.9.2 Duct Installation.

In the last sentence of the first paragraph, delete the words "more than ⅛ inch (3.2mm)".

23.20.504.9.5 Length identification.

Add after "equivalent length exceeds 35 feet (10 668mm)" the following:
"or is concealed from visual inspection".

Add to the end of the paragraph:

"and shall be laminated or in a moisture-resistant sleeve secured to the wall using screw, staples, or thumb tacks. Push pins will not be accepted."

23.20.505.3 Exhaust Ducts.

Insert the following sentence after the second sentence:

Clearance above cook top shall be at least 30 inches to unprotected combustible material. When the underside of such combustible material is protected with insulating millboard at least ¼-inch thick covered with 0.021-inch-thick (No. 28 U.W. Gauge) sheet metal or a metal ventilating hood, the distance shall not be less than 24 inches.

Delete exception No. 1.

23.20.505.4 Makeup air required.

Add the following exception:

Exception: Where exhausting in excess of 400 cfm, a back draft test may be performed to verify proper operation of all combustion appliances without providing makeup air. If back drafting occurs under any operational scenario, makeup air shall be provided.

23.20.505.6 Other than Group R.

Revise the section title to read "All Occupancies".

Replace the wording "other than Group R occupancies" with "All occupancies".

23.20.507.1.2 Domestic cooking appliances used for commercial purposes.

Add the following exception:

Exception: A residential gas or electric stovetop with up to 4 burners, used for warming foods in a commercial building application such as an office building break room or church kitchen may utilize a residential or Type II exhaust hood, vented to the exterior under the following stipulations:

1. The intended use will not produce grease laden vapors or smoke.
2. A letter of intended use is submitted to the AHJ stating the intended use with a printed menu if applicable. This provision does not apply to office break rooms.
3. A permanent laminated or moisture resistant sign shall be placed in plain sight within 6-feet of the stove top stating "Cooking that produces grease laden vapors or smoke is prohibited." This provision does not apply to office break rooms.

23.20.507.2.6 Clearances for Type I hood.

In Exception #1, replace "in all directions from the hood" with "beyond the top and sides, and continuous to the floor."

23.20.510.1 Dust, stock and refuse conveying systems.

Add the following exception:

Exception: Manufactured dust collectors and separators designed and installed in accordance with NFPA 664.

23.20.514 Multi-port exhaust fans.

Add Section 514 as follows:

514 Multi-port exhaust fans

514.1 General.

Multi-port exhaust fan installations shall comply with the following:

1. This type of fan may be used for exhausting environmental air such as bathrooms and toilet rooms and shall not be used for clothes dryer or range exhaust.
2. If this fan is installed in the attic, it shall be within 3-feet of the attic access and the exhaust registers it serves shall be permanently labeled as to the location of the fan for service and maintenance.
3. The operating range for these fans is limited to -40 degrees F to +140 degrees F.
4. Combustion air requirements for fireplaces, water heaters, furnaces, boilers, etc., shall not be affected by the use or operation of this type of fan.
5. These fans shall not be used to exhaust combustible or flammable vapors, fumes, or dusts.
6. The exhaust fan and ductwork shall be insulated with minimum 2-inch thick fiberglass duct insulation to minimize heat transfer to the attic space, which can result in ice damming on the roof.
7. All ceiling vapor barrier penetrations shall be sealed airtight to minimize condensation build-up in the attic and ice damming on the roof.
8. All duct seams shall be sealed airtight with duct mastic/sealer to prevent condensation damage in the attic.

23.20.601.4 Contamination prevention.

Amend by adding the following two exceptions:

Exceptions:

3. Environmental air exhaust ducts under positive pressure may extend into or through ducts or plenums if one of the following design approaches is used:
 - 3.1. Route environmental air exhaust ducts inside a shaft when passing through a duct or plenum.

3.2. Install a second duct around the environmental air exhaust duct where passing through ducts and plenums to minimize leakage to the duct or plenum; seal both ends of the outer duct to outside.

3.3. Seal the environmental air exhaust ducts along all seams and joints using a listed low to medium pressure duct sealant, typically applied by brush, trowel, or caulking gun; install sealant per manufacturer's recommendations.

3.4. Provide flexible duct with no seams in the duct or plenum only to a limit of 8 feet. The 8 foot limit is due to high static losses. Also, sleeving the metal duct with flexible seamless duct is acceptable.

4. Gas vents installed in accordance with section 503.3.6 in the International Fuel Gas Code.

23.20.601.5 Return Air Openings.

Delete item #6.

Add "or underfloor crawlspace" to the end of item #7.

23.20.602.1.1 Locations Limited.

Delete from the first sentence the words "uninhabited crawl spaces".

Add the following sentence to the end of the paragraph:

Underfloor crawlspaces shall not be used as plenums.

23.20.701.3 Circulation of air.

Add a new section as follows:

701.3 Circulation of air.

Fuel burning appliances may be required to pass a back-draft test as a part of the final plumbing or mechanical inspection. This test shall be conducted with all exhaust fans operating and with fireplace draft open.

23.20.801.20 Plastic vent joints.

Add to the end of the paragraph:

Solvent cement joints for CPVC and PVC pipe and fittings shall be primed. The primer shall be a contrasting color listed for the use.

23.20.801.22 Location and support of venting systems other than masonry chimneys.

Add a new section as follows:

801.22 Location and support of venting systems other than masonry chimneys. Unless a vent or chimney listed for exterior use in cold weather climates is installed, a vent or chimney system installed exterior to the building outside the thermal envelope shall be enclosed in an insulated (R-

19 minimum) chase. The portion of the system above the last (highest) roof and its projected plane need not be enclosed. The portion of the system passing through an attic space need not be insulated or enclosed.

23.20.802.10 Vent terminals - ice and snow protection.

Add a new section as follows:

802.10 Vent terminals – ice and snow protection. Vent terminations penetrating any metal roof or an asphalt shingle roof exceeding an 8/12 pitch shall be protected by an *approved* type of snow retention or diversion device.

23.20.923.1 General.

Replace references to "Section 104.2.3" with "the Anchorage Administrative Code".

23.20.923.2 Small ceramic kilns - ventilation.

Amend by adding the following section:

923.2 Small ceramic kilns - ventilation.

A canopy-type hood shall be installed directly above each kiln. The face opening area of the hood shall be equal to or greater than the top horizontal surface area of the kiln. The hood shall be constructed of not less than 0.024-inch (No. 24 U.S. gauge) galvanized steel or equivalent and be supported at a height of between 12 inches and 30 inches above the kiln by noncombustible supports.

Exception: Electric kilns installed with listed exhaust blowers may be used when marked as being suitable for the kiln and installed in accordance with manufacturer's instructions.

Each hood shall be connected to a gravity ventilation duct extending in a vertical direction to outside the building. This duct shall be of the same construction as the hood and shall have a minimum cross-sectional area of not less than one-fifteenth of the face opening area of the hood. The duct shall terminate a minimum of 12 inches above any portion of a building within 4-feet and terminate no less than 4-feet from any openable windows or other openings into the building or adjacent property line. The duct opening to the outside shall be shielded, without reduction of duct area, to prevent entrance of rain into the duct. The duct shall be supported at each section by noncombustible supports.

Provisions shall be made for air to enter the room in which a kiln is installed at a rate at least equal to the air being removed.

23.20.1001.1 Scope.

Amend Exception 7 by deleting the words "or state".

23.20.1004.4 Mounting.

Add the following to the end of the paragraph:

Boilers shall be installed in a water-tight pan of corrosion-resistant material.

The pan shall be equipped with a minimum $\frac{3}{4}$ -inch diameter drain discharging to an approved location.

Exceptions:

1. A pan is not required when a boiler is installed on a concrete slab.
2. A pan is not required where a corrosion-resistant material is placed under the boiler provided that it covers the entire platform and extends to all walls adjoining the platform and turning up the walls a minimum of 2 inches.

23.20.1006.6 Safety and relief valve discharge.

Add item #14 to read:

14. When a boiler is installed on a platform, the boiler relief valve piping shall discharge to between 6 and 24 inches off the finished floor over the edge of the platform.

23.20.1006.7 Boiler safety devices.

Add to the end of the section:

At a minimum, boilers shall meet the requirements of Table 1006.7.

23.20.Table 1006.7 Controls and Limit Devices for Automatic Boilers.

Trail for Main			Safety Control Timing (Nominal Maximum Time in Seconds)												
Boiler Group	Fuel	Fuel Input Range ¹ (Inclusive) (x0.293071 for W)	Type Of Pilot ²	Trial for Pilot	Direct Electric Ignition	Flame Pilot	Main Burner Flame Failure ³	Assured Fuel Supply Control ⁴	Assured Air Supply Control ⁵	Low Fire Start Up Control ⁶	Pre-Purging Control ⁷	Hot Water Temp. and Low Water Limit Controls ⁸	Steam Pressure and Low Water Limit Controls ⁹	Approved Fuel Shutoff ¹⁰	Control and Limit Device System Design ¹¹
A	Gas	0-400,000 Btu/h	Any type	90	Not required	90	90	Not required	Required	Not required	Not required	Required	Required	Not required	Required
B	Gas	400,001-2,500,000 Btu/h	Interrupted or intermittent	15	15	15	2-4	Not required	Required	Not required	Not required	Required	Required	Not required	Required
C	Gas	2,500,001-5,000,000 Btu/h	Interrupted or intermittent	15	15	15	2-4	Required	Required	Required	Required	Required	Required	Required	Required
D	Gas	Over 5,000,000 Btu/h	Interrupted	15	15	15	2-4	Required	Required	Required	Required	Required	Required	Required	Required
E	Oil	0-400,000 Btu/h	Any type	Not required	90	90	90	Not required	Required	Not required	Not required	Required	Required	Not required	Required
F	Oil	400,001-1,000,000 Btu/h	Interrupted	Not required	30	30	2-4	Required	Required	Not required	Not required	Required	Required	Not required	Required
G	Oil	1,000,001-3,000,000 Btu/h	Interrupted	Not required	15	15	2-4	Required	Required	Not required	Not required	Required	Required	Not required	Required
H	Oil	Over 3,000,000 Btu/h	Interrupted	15	15	60	2-4	Required	Required	Required	Required	Required	Required	Required	Required
K	Elec	All	Not required	Not required	Not required	Not required	Not required	Not required	Not Required	Not required	Not required	Required	Required	Not required	Required

1. Fuel input shall be determined by one of the following:
 - a. The maximum burner input as shown on the burner nameplate or as otherwise identified by the manufacturer.
 - b. The nominal boiler rating, as determined by the building official, plus 25 percent.
2. Automatic boilers shall have one flame failure device on each burner which shall prove the presence of a suitable ignition source at the point where it will reliably ignite the main burner, except that boiler Groups A, B, E, F and G which are equipped with direct electric ignition shall monitor the main burner, and all boiler groups using interrupted pilots shall monitor only the main burner after the prescribed limited trial and ignition periods. Boiler Group A equipped with continuous pilot shall accomplish 100 percent shutoff within 90 seconds upon pilot flame failure. The use of intermittent pilots in boiler Group C is limited to approved burner units.
3. In boiler Groups B, C and D, a 90-second main burner flame failure limit may apply if continuous pilots are provided on manufacturer-assembled boiler-burner units approved by an Approved testing agency as complying with nationally recognized standards approved by the building official. Boiler Groups F and G equipped to reenergize their ignition system within 0.8 second after main burner flame failure shall be permitted 30 seconds for Group F or 15 seconds for Group G to reestablish its main burner flame.
4. Boiler Groups C and D shall have controls interlocked to accomplish a nonrecycling fuel shutoff upon high or low gas pressure, and boiler Groups F, G and H using steam or air for fuel atomization shall have controls interlocked to accomplish a nonrecycling fuel shutoff upon low atomizing steam or air pressure. Boiler Groups F, G and H equipped with a preheated oil system shall have controls interlocked to provide fuel shutoff upon low oil temperature.
5. Automatic boilers shall have controls interlocked to shut off the fuel supply in the event of draft failure if forced or induced draft fans are used or, in the event of low combustion airflow, if a gas power burner is used. Where a single motor directly driving both the fan and the oil pump is used, a separate control is not required.
6. Boiler Groups C, D and H, when firing in excess of 400,000 Btu per combustion chamber, shall be provided with low fire start of its main burner system to permit smooth light off. This shall normally be a rate of approximately one-third of its maximum firing rate.
7. Boiler Groups C, D and H shall not permit pilot or main burner trial for ignition operation before a purging operation of sufficient duration to permit a minimum of four complete air changes through the furnace, including combustion chamber and the boiler passes. Where this is not readily determinable, five (5) complete air changes of the furnace, including combustion chamber up to the first pass, shall be considered equivalent. An atmospheric gas burner with no mechanical means of creating air movement or an oil burner which obtains two-thirds or more of the air required for combustion without mechanical means of creating air movement shall not require purge by means of four (4) air changes so long as its secondary air openings are not provided with means of closing. If such burners have means of closing secondary air openings, a time delay shall be provided which puts these closures in a normally open position for four (4) minutes before an attempt for ignition. An installation with a trapped combustion chamber shall in every case be provided with a mechanical means of creating air movement for purging.
8. Every automatic hot-water-heating boiler, low-pressure hot-water-heating boiler, and power hot-water boiler shall be equipped with two (2) high-temperature limit controls with a manual reset on the control with the higher setting interlocked to shut off the main fuel supply, except the manual reset on the high-temperature limit control shall not be required on any approved by an approved testing agency. Every automatic hot-water heating, power boiler and package hot-water supply boiler shall be equipped with one low-water-level limit control with a manual reset interlocked to shut off the fuel supply, installed to prevent damage to the boiler and to permit testing of the control without draining the heating system except on boilers used in Group R Occupancies of less than six (6) units. However, a low- water-flow limit control installed in the circulating water line may be used instead of the low-water-level limit control for the same purpose on coil-type boilers.
9. Every automatic low-pressure steam-heating boiler, small power boiler and power steam boiler shall be equipped with two high-steam pressure limit controls interlocked to shut off the fuel supply to the main burner with manual reset on the control with the higher setting, and two (2) low-water-level limit controls, one of which shall be provided with a manual reset device and independent of the feed water controller. Coil-type flash steam boilers may use two (2) high-temperature limit controls, one of which shall be manually reset in the hot-water coil section of the boiler instead of the low-water-level limit control.

10. Boiler Groups C, D and H shall use an approved automatic reset safety shutoff valve for the main burner fuel shutoff, which shall be interlocked to the programming control devices required. On oil burners where the safety shutoff valve shall be subjected to pressures in excess of ten (10) psi when the burner is not firing, a second safety shutoff valve shall be provided in series with the first. Boiler Groups C and D, using gas in excess of 1-pound-per-square-inch pressure or having a trapped combustion chamber or employing horizontal fire tubes, shall be equipped with two (2) approved safety shutoff valves, one of which shall be an automatic-reset type, one of which may be used as an operating control, and both of which shall be interlocked to the limit-control devices required. Boiler Groups C and D using gas in excess of 1-pound-per-square-inch pressure shall be provided with a permanent and ready means for making periodic tightness checks of the main fuel safety shutoff valves.
11. Control and limit device systems shall be grounded with operating voltage not to exceed 150 volts except, on approval by the building official, existing control equipment to be reused in an altered boiler control system may use 220-volt single phase with one side grounded, provided such voltage is used for all controls. Control and limit devices shall interrupt the ungrounded side of the circuit. A readily accessible means of manually disconnecting the control circuit shall be provided with controls so arranged that when they are de-energized the burner shall be inoperative.

23.20.1006.8 Electrical requirements.

Delete this section in its entirety.

23.20.1007 Boiler low-water cutoff.

Delete this section in its entirety.

23.20.1101.7 Changing refrigerant.

Delete item 2 in its entirety.

In item 4, replace "shall require code official approval" with the following:

Shall require one of the following:

- 4.1. Written instructions from the original equipment manufacturer.
- 4.2. An evaluation of the system by a registered design professional or approved agency that validates safety and suitability of the replacement refrigerant.

23.20.1105.3 Refrigerant detector.

Add a second sentence to read as follows:

Refrigerant detectors shall alarm audibly and visually both inside and outside the machinery room or refrigerated space.

23.20.1105.6.2 Makeup air.

Amend last sentence by changing ¼-inch to ½-inch.

23.20.1105.10 Seismic protection.

Add Section 1105.10 as follows:

1105.10 Seismic protection.

Refrigeration piping supported by equipment and/or structures that are not supported by a common foundation shall be installed to accommodate differential movement. Flexible connectors, soft copper piping loops and swing joints are an acceptable means. Flexible connectors shall be

approved for use in refrigeration systems, and when installed outdoors,
shall be approved for outdoor use.

Section 6. Anchorage Municipal Code Chapter 23.25 is hereby repealed in its
entirety and replaced with the following:

**Chapter 23.25 LOCAL AMENDMENTS TO THE UNIFORM
PLUMBING CODE**

23.25.100 Local amendments to the Uniform Plumbing Code.

Amendments to the Uniform Plumbing Code (UPC) 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.

Plumbing provisions for swimming pools, spas and hot tubs shall be in
accordance with Title 16 and the Uniform Swimming Pool, Spa and Hot Tub
Code adopted by the State of Alaska.

23.25.103—13.25.107 Delete.

Delete sections 103 through 107. Refer to the Anchorage Administrative
Code.

23.25.204.0 Definitions. -B-

Amend by adding the following definition:

Bathroom. Any room or space containing a bathtub, shower, combination
bath/shower, hot tub, or swimming pool.

23.25.210.0 Definitions. -H-

Amend by adding the following definition:

Health Care Facilities. Buildings or portions of buildings in which medical,
dental, psychiatric, nursing, obstetrical or surgical care is provided.

23.25.312.12.3 Tub waste openings (Rodent proofing).

Delete Section 312.12.3.

23.25.314.4 Excavations (Trenching, Excavation, and Backfill).

Amend section by adding, after the third sentence, the following:

Backfill material shall be $\frac{3}{8}$ -inch pea gravel or smaller. In the case of cast
iron drain, waste and vent piping, the backfill material shall be $\frac{3}{4}$ -inch gravel
and earth or smaller.

23.25.318.2 Pressure tests (10 psi or less).

Replace 0.10 psi with 0.20 psi.

23.25.321.0 Mezzanines and platforms.

Amend by adding Section as follows:

321.0 Mezzanines and platforms.

Every mezzanine or platform containing appliances or equipment requiring access more than 10-feet 6-inches above the ground or floor level shall be made accessible by a stairway or ladder fastened to the structure. The ladder shall be constructed in accordance with Section 306.5 of the International Mechanical Code.

23.25.407.4 Transient public lavatories.

Add the following to the end of the sentence:

bus stations, cocktail lounges, bars, concert halls, sports arenas, theaters, shopping malls, churches, and grocery stores.

23.25.409.4 Limitation of hot water in bathtubs and whirlpool tubs.

Add the following item to the list:

(3) A valve installed at the point of use and complying with ASSE 1016/ASME A112.1016/CSA B125.16.

23.25.409.6 Installation and Access.

Add the following to the end of the section:

The access opening shall be a minimum of 16 inches by 16 inches, although alternate access arrangements may be considered. The intent is the pump can be easily and safely removed. Pumps shall be located so the supporting or securing bolts are no more than 2-feet from the access opening. The access panel may be caulked in place but shall remain easily removable. If removal of a pump motor is in question, the contractor may be required to remove the pump motor to demonstrate proper access.

23.25.415.2 Drinking Fountain Alternatives.

Delete section 415.2. Refer to International Building Code.

23.25.418.6 Unvented garage floor drains.

Add section as follows:

418.6 Unvented garage floor drains.

418.6.1 General.

A maximum of three unvented floor drains may be installed in a residential garage serving a single-family home or duplex. Each floor drain shall be 2-inch minimum with 3-inch minimum trap and trap arm. No other plumbing fixtures may be connected to the garage drain piping.

418.6.2 Inspections.

Underground inspections of these floor drains are not required, but spot checks may be made by inspectors. If requested, MOA staff performs this inspection at no additional fee.

23.25.422 Minimum number of required fixtures.

Delete section 422. Refer to the International Building Code.

23.25.423.0 Minimum hot water supply temperature.

Add section as follows:

423.0 Minimum hot water supply temperature.

The minimum hot water temperature to showers, tub and shower combinations, and tub fillers shall be 110°F, except for engineered systems.

23.25.504.1 Location.

In subparagraph (2) delete the reference to Section 506.4 and replace with "the IFGC."

23.25.504.6 Temperature pressure and vacuum relief devices.

Add the following sentence:

When a water heater is installed in a garage, the water heater relief valve piping shall discharge to the floor over the edge of the platform.

23.25.506.0 Air for combustion and ventilation.

Delete section 506.0. Refer to the IMC and IFGC.

23.25.507.2 Seismic Provisions.

Add an exception as follows:

Exception: Tank type gas and electric water heaters that are a maximum of 10 gallons require only one approved seismic strap placed as close to the middle of the heater as possible, measured vertically, without blocking access to the controls.

23.25.507.5 Drainage Pan.

Replace Section 507.5 with the following:

507.5 Drainage pan.

Water heaters shall be installed in a watertight pan of corrosion-resistant material. The pan shall be equipped with a minimum ¾-inch diameter drain discharging to an approved location. Water heater enclosures shall be provided with an approved floor drain.

Exceptions:

1. A floor drain is not required when a water heater is installed in a garage and the garage floor slopes to the exterior.
2. A floor drain is not required if a water heater is equipped with a listed safety device to control flooding.

3. A floor drain is not required when a water heater is installed in an attic or above a drop ceiling and the pan is drained to an approved location.
4. A pan is not required when a water heater is installed on a concrete slab on grade.
5. A pan is not required in a garage, where a corrosion-resistant material is placed under the water heater provided that it covers the entire platform and extends to all walls adjoining the platform and turning up the walls a minimum of two inches.

23.25.507.6 Added or converted equipment or appliances.

Revise Items (1) through (3) to read as follows:

- (1) Air for combustion and ventilation is provided where required, in accordance with the provisions of the International Fuel Gas Code (IFGC), Chapter 3. Where existing facilities are not adequate, they shall be upgraded to meet the IFGC.
- (2) The installation components and appliances meet the clearance to combustible material provisions of the IFGC, Chapter 3.
- (3) The venting system is constructed and sized in accordance with the provisions of the IFGC, Chapter 5. Where the existing venting system is not adequate, it shall be upgraded to comply with the IFGC.

23.25.507.13 Installation in residential garages.

Delete the exception.

23.25.507.16 Venting of flue gases.

Replace "Section 509.0" with " the IMC or IFGC as applicable."

23.25.507.25 Accessibility for Service.

Replace "Section 508.4" with " IMC Section 306 or IFGC Section 306 as applicable."

23.25.507.26 Clearance to combustible materials.

Delete Section 507.26. Refer to the IMC or IFGC as applicable.

23.25.507. 27Water heaters located in manufactured (mobile) homes.

Add Section as follows:

507.27 Water heaters located in manufactured (mobile) homes.

- A. Installation of a water heater in a compartment off a bedroom shall be acceptable if the water heater was factory installed, the compartment is sealed from the bedroom by a panel screwed to

the wall, and the combustion air is taken from a source outside of the bedroom and complies with the IMC and IFGC.

- B. Replacement water heaters shall be tested, approved, and listed for use in manufactured homes. Combustion air shall be provided in accordance with the IMC and IFGC.

23.25.508.0 Appliances on Roofs, in Attics or Under-Floor Spaces.

Delete Section 508.0. Refer to the IMC or IFGC as applicable.

23.25.509.0 Venting of appliances.

Delete Section 509.0. Refer to the IMC or IFGC as applicable.

23.25.510.0 Sizing of category I venting systems.

Delete Section 510.0. Refer to the IFGC.

23.25.603.0 Cross-connection control.

Amend section 603.0 by adding the following:

PURPOSE AND SCOPE: The purpose of this section is to protect the public health by controlling or eliminating actual or potential cross-connections. The control or elimination of cross-connections shall be in accordance with this code and the current editions of:

1. The Cross-Connection Control Manual published by the Pacific Northwest Section of The American Water Works Association,
2. The Manual of Cross-Connection Control published by the University of Southern California Foundation for Cross-Connection Control, and
3. The Backflow Prevention Reference Manual published by the International Association of Plumbing Mechanical Officials.

In the event a conflict exists between the technical publications adopted herein and the Uniform Plumbing Code, the most stringent provision shall apply.

UNSAFE FACILITIES: The Municipality may refuse to furnish water and may discontinue services to any premises where plumbing facilities, appliances, or equipment using water are dangerous, unsafe, or not in conformity with the water utility tariff or other related municipal ordinances. No potable water service connection to any premises shall be installed or continued in use by a purveyor unless the potable water supply is protected by all necessary backflow prevention devices and assemblies. The installation or maintenance of a cross-connection, endangering the quality of the purveyor's water supply, shall be unlawful and is prohibited.

ADMINISTRATIVE AUTHORITY: The Building Official or authorized representative.

PURVEYOR: The operator or owner of a water supply.

PREMISES: Real property, including any house or building thereon, located within the Municipality of Anchorage.

CROSS-CONNECTION INSPECTIONS: No water shall be delivered to any structure hereafter built within the Municipality of Anchorage until it is inspected by the Administrative Authority or water supply utility for possible cross-connections and approved as being protected from such cross-connections.

Inspections may be made periodically of all potentially hazardous buildings, structures, or improvements of any nature now receiving water through the municipal water system, for the purpose of ascertaining whether cross-connections exist. Such inspections shall be made by the Administrative Authority or water supply utility.

Any building modification requiring a plumbing or mechanical permit may require a cross-connection inspection and compliance.

POSSIBLE CROSS-CONNECTIONS: Backflow prevention assemblies or devices shall be installed in any premises where, in the judgment of the Administrative Authority, the nature and extent of activities, or the materials used or stored on the premises, may present a hazard to the potable water supply in the event a cross-connection were to be made; even though such cross-connection has not been made. Such circumstances include, but are not limited to:

1. Premises having an auxiliary water supply.
2. Premises having intricate plumbing arrangements making it impractical to ascertain whether or not cross-connections in fact exist.
3. Premises where entry is restricted so inspection for cross-connections cannot be made with sufficient frequency or on sufficiently short notice to assure cross-connections do not exist.
4. Premises having a repeated history of cross-connections being established or re-established.
5. Premises on which any substance is handled under pressure, so as to permit entry into the water supply. This shall include the handling of process waters and cooling waters.
6. Premises where materials of a toxic or hazardous nature are handled in such a way if back siphonage should occur, a health hazard might result.

The following facilities, or portions of a building containing one of the listed facilities, when connected to a potable water supply, require backflow prevention assemblies or devices unless the authority having jurisdiction determines no hazard exists. An example of a facility within a building is a dental office in a multi-story office building. For this application, a reduced pressure principle backflow preventer is required to be installed on the hot and cold water serving the dental office and backflow prevention is not

required on the main supply to the building. This protects both the city main and the occupants in the building:

Hospitals, mortuaries, and clinics;
Laboratories;
Metal plating industries;
Piers and docks;
Sewage treatment plants;
Food or beverage processing plants;
Chemical plants;
Petroleum processing or storage plants;
Radioactive material processing plants, nuclear reactors, or other facilities where radioactive materials may be utilized;
Manufacturing facilities;
Car wash facilities;
Water systems not within the definition of potable water supply;
Fire sprinkler systems;
Medical/dental facilities;
Waterfront facilities;
Irrigation systems;
Laundries and dry cleaners;
High rise or other buildings above system pressure which require booster pumps; and
Sand, gravel and concrete plants or other material processing plants.

23.25.603.2 Approval of devices and assemblies.

Add the following:

Backflow assemblies and devices shall be considered approved if they successfully passed both the laboratory and field evaluation tests conducted by the University of Southern California Foundation for Cross-Connection Control.

23.25.603.4.8 Area drain sizing for backflow assemblies.

Replace section 603.4.8 "Drain Lines" with the following:

603.4.8 Area drain sizing for backflow assemblies. For new building construction, backflow devices or assemblies with drainage (reduced pressure principle assemblies) shall be provided with an area drain, as listed below.

Backflow Device Size	Area Drain Waste Line Minimum Size
1" and less	2"
1¼"—2"	3"
2½"—3"	4"
4" and greater	6"

Exception: Area drain size is not required to be larger than building sewer service line

23.25.603.5.6.4 Lawn irrigation.

Add the following Section:

603.5.6.4 Lawn irrigation.

The Uniform Plumbing Code regulates the installation of these types of plumbing systems up to and including the required type(s) of backflow preventer. A permit, plan check, and inspection are required to ensure the potable water piping is sized correctly for the number of fixture units effected by such a system and required piping material and backflow preventer(s) are installed. The installation downstream of the required backflow preventer is not regulated by the plumbing code and is considered non-potable water piping. Installation of backflow preventers and/or vacuum breakers on public systems shall be done by a plumbing contractor properly licensed with the Municipality of Anchorage. Private installations require either a plumbing contractor or a legal owner in accordance with the Anchorage Administrative Code.

23.25.603.5.8 Water-cooled equipment.

Add a second paragraph to read as follows:

Installation, operation or use of air conditioning or cooling units employing water or other fluid as a cooling agent without a recovery and recirculation unit is prohibited.

23.25.603.5.10 Steam or hot water boilers.

Amend as follows:

603.5.10 Steam or hot water boilers. Potable water connections to hot water boilers shall be protected from backflow by a minimum double check valve with intermediate vent backflow prevention assembly complying with ASSE 1012. Potable water connections to steam boilers shall be protected from backflow by a minimum reduced pressure principle backflow prevention assembly in accordance with Table 603.2. Where chemicals are introduced into the system a reduced pressure principle backflow prevention assembly shall be provided in accordance with Table 603.2.

23.25.603.5.23 Potable water supply to dental chairs.

Add Section as follows:

603.5.23 Potable water supply to dental chairs. Potable water supply to each individual dental chair shall be protected at a minimum by a Spill-Resistant Pressure Vacuum Breaker. backflow prevention device.

23.25.603.5.24 Hydronic heating/cooling.

Add Section as follows:

603.5.24 Hydronic heating/cooling. Systems with heat transfer fluids containing plain water or water/propylene glycol mixture require a minimum double check valve with intermediate atmospheric vent backflow preventer, complying with ASSE 1012, to be installed on any directly connected potable water makeup piping to the system. The below listed requirements apply when a system contains propylene glycol:

1. Water/propylene mixture shall contain a food grade powder dye. (A suitable example is FD+C Powder Dye.) Liquid food coloring is not acceptable due to its potential dissipation into the system.
2. A warning tag shall be installed on the backflow preventer stating the following information:
 - A. System contains propylene glycol - use no other substitute.
 - B. Do not add ethylene glycol or automotive anti-freeze of any type.
 - C. No high hazard toxic chemicals permitted to be added to this system.

Systems having a heat transfer fluid containing Ethylene Glycol (approved for such use) require minimum protection of the potable water makeup system by installation of a physical air gap or a reduced pressure principal backflow preventer.

23.25.603.5.25 Steam systems.

Add Section as follows:

603.5.25 Steam systems.

Due to the potential addition of toxic chemicals in any steam system, the minimum protection for the potable water makeup shall be by installation of a physical air gap or a reduced pressure principal backflow preventer.

23.25.603.5.26 Cooling towers.

Add Section as follows:

603.5.26 Cooling towers. Cooling towers obtaining makeup water from a potable source shall have a reduced pressure principal backflow preventer or air gap separation installed at the source of the potable water.

23.25.603.5.27 Buildings over 30 feet in height.

Add Section as follows:

603.5.27 Buildings over 30 feet in height. Buildings with water piping exceeding 30 feet in height measured from grade plane as defined by the Building Code to the highest portion of the piping system shall be equipped with a Double Check Valve Assembly on the main water supply to the building.

23.25.603.5.28 Commercial hose bibbs.

Add Section as follows:

603.5.28 Commercial hose bibbs. Hose bibbs within facilities that have a potential for a high hazard cross-connection such as automotive and maintenance shops and any facility where chemicals are used or stored in the vicinity of the hose bibb shall be protected by a minimum pressure vacuum breaker or spill-resistant vacuum breaker.

23.25.603.5.29 Steam producing kitchen appliances.

Add Section as follows:

603.5.29 Steam producing kitchen appliances. Steam producing kitchen appliances shall be protected from backflow by a minimum double check valve with intermediate vent backflow prevention device complying with ASSE 1012.

23.25.604.1 Pipe, tube and fittings (Materials).

Add the following sentence:

Nonmetallic piping shall not be used for cold water building supply distribution systems outside of a building.

Add the following exception:

Exception: Plastic materials where allowed under Section 604.10 as amended.

23.25.604.3 Copper or copper alloy tube (Materials).

Delete "or underground outside of structures" in the Exception.

23.25.604.10 Plastic materials.

Replace section 604.10 with the following:

604.10 Plastic materials.

Plastic piping materials shall not be used for water service piping from the street service main, private well, or other water source to a building or premises.

Exceptions:

1. PVC or HDPE water service pipe 4-inch in diameter and greater may extend from the utility main horizontally into the footprint of the building. The piping shall transition underground to an approved metallic pipe at a 90-degree fitting. The PVC and HDPE pipe and fittings shall comply with the latest version of the Anchorage Water and Wastewater Utility (AWWU) Design Construction Practice Manual (DCPM).

2. For residential private wells serving two or less dwelling units, approved plastic materials shall be permitted to be used where all the following conditions are met:
 - a. Supply piping shall be minimum 1" inner diameter HDPE as listed for PE in Table 604.1.
 - b. Pipe joints shall only be made by socket fusion in accordance with Section 605.6.1.3.
 - c. Where the riser enters the building and prior to other connections, a "T" with threaded cap or plug must be installed for thawing purposes.
 - d. Where replacing an existing metallic pipe: if the metallic pipe was used for electrical grounding, it shall remain for electrical grounding purposes or an approved alternative electrical grounding system shall be installed.
 - e. A tracer wire shall be installed in accordance with Section 604.10.1.

23.25.606.3 Multi-dwelling units.

Add the following to the end of the section:

Shutoff valves located in a crawlspace shall be visible and shall be located within 10-feet of the crawl space access hatch/door.

23.25.608.5 Discharge piping.

Delete item (7).

23.25.609.3 Under concrete slab.

Add the following exception:

Exception: Brazing shall not be required on non-pressurized, non-potable piping such as trap primers. Where joints are permitted, they shall be of the approved type.

23.25.609.11.1 Mechanical devices.

Add the following:

Properly sized expansion tanks approved for potable water may be used in a single-family or duplex residence in lieu of water hammer arresters. Such expansion tanks shall be installed on the cold water piping between the residence shutoff valve and each water heater location. In the event the expansion tank(s) do not eliminate water hammer, mechanical water hammer devices will be required. Examples of quick-acting valve locations include, but are not limited to, dishwasher, clothes washer, toilet ballcock, icemaker, and any single handle faucet.

23.25.609.12 Pipe insulation.

Delete section. Refer to the IECC for insulation requirements.

23.25.609.13 Crawlspace water supply access.

Add Section as follows:

609.13 Crawlspace water supply access.

An unobstructed clear passageway no less than 30 inches high by 22 inches wide is required from the crawlspace access to the water supply line entrance.

23.25.610.8 Size of meter and building supply pipe using Table 610.4.

Replace the last sentence with the following:

No new street service or building supply pipe shall be less than 1-inch in diameter.

23.25.612.0 Residential fire sprinkler systems.

Delete section 612.0. Required residential fire sprinkler systems shall comply with the International Fire Code.

23.25.613.0 Indoor water meter setter.

Add Section as follows:

613.0 Indoor water meter setter.

All newly constructed single family, duplex and triplex residences shall have an approved indoor water meter setter with meter idler or a removable section of pipe to facilitate the future installation of water meters in a horizontal position. It shall be located in the vicinity of the main supply full-way valve, ahead of any branch lines and shall also have a valve on the outlet side. An easily accessible frost-proof area with adequate clearances shall be provided for meter installation, maintenance or removal. "Easily accessible" shall be considered an open area not concealed by an appliance, furnace, water heater or standard building material. When the meter is installed in a crawlspace, the maximum distance from the access opening to the meter shall not exceed 10-feet.

A horizontal section of pipe may be used in lieu of the indoor meter setter provided the pipe is equal in length to a water meter of the same size including meter couplings, but in no case shall it be less than 24 inches in length. The piping shall be supported to provide a permanent support for the water meter when installed.

When the water tariff is revised to allow the metering of these residences, the utility shall furnish two meters and remote feed-outs at its expense and its crews shall install remote read-out meters at the time of actual meter installation.

Exception: this provision shall not apply to private wells.

23.25.704.3 Commercial Sinks.

Amend the second sentence in paragraph 704.3 to read as follows:

A floor drain or flush mounted floor sink shall be provided within 5 feet of the fixture, and shall be connected on the sewer side of the sink.

Add the following exception:

Exception: Commercial sinks may indirectly waste to a floor sink where no grease trap exists.

23.25.712.1 Media.

Delete "except that plastic pipe shall not be tested with air" from the first sentence.

23.25.719.1 Locations (Building Sewer Cleanouts).

Replace the first paragraph with the following:

Cleanouts shall be placed at the end of building drains, 2-feet outside of the building and shall be of same material as the building drain.

23.25.724.0 Building drain access.

Add Section as follows:

724.0 Building drain access.

An unobstructed clear passageway no less than 30 inches high by 22 inches wide is required from the crawlspace access to the building drain entrance and all cleanouts.

23.25.801.4 Bar and fountain sink traps.

Amend by replacing "5 feet" with "15 feet".

23.25.814.1.1 Condensate Pumps.

Add the following exception:

Exception: Dwellings that fall under the scope of the International Residential Code.

23.25.814.2 Condensate control.

Amend item (1) by adding the following sentence:

This section does not apply to dwellings that fall under the scope of the IRC.

23.25.815.0 Soda fountains, condensates, drip pans, ice machines, and other similar equipment.

Add Section as follows:

815.0 Soda fountains, condensates, drip pans, ice machines, and other similar equipment.

- A. If the drain outlet for this type of equipment is below or remotely located from an approved point of disposal, the equipment may drain by gravity to a single pump, lift station receiver based on the following:
1. A "Little Giant" condensate unit or equal is acceptable for lift station receiver. The pump shall be appropriately sized for the required condition.
 2. The equipment drain outlet or tailpiece may not exceed 1-inch I.D.
 3. The discharge pipe and fittings from the lift station receiver shall be a material approved for drainage piping and shall be piped to an approved indirect waste receptor per Chapter 7.
- B. Vending company employees may install the drainage piping from the equipment they install to an approved point of disposal, provided the equipment drain pipe from the outlet of the tailpiece to a lift station receiver or approved point of disposal does not exceed 5-feet measured along the centerline of the pipe and such piping is installed in accordance with this code.
- C. If the equipment installed requires a water supply, it shall be provided by a properly licensed plumber to within 10-feet of the equipment, complete with any required backflow prevention device. The vendor employee may make the water connection from that point to the equipment.

23.25.906.1 Roof Termination.

Change "6 inches" to "18 inches". Delete the last sentence of the section.

23.25.906.8 Roof Terminations.

Add Section as follows:

906.8 Roof Terminations. For roof construction, including those regulated by the International Residential Code:

1. All roof penetrations shall be located a minimum of six feet from valley centerline and four feet from the exterior wall line measured on a horizontal plane.

23.25.908.2 Horizontal Wet Venting for Bathroom Groups.

Add to the end of the section:

"and detail or schematic is provided and approved."

23.25.911.0 Circuit Venting.

Add to the end of the first sentence:

“where engineered design and detail or schematic is provided and approved.”

23.25.913.0 Air Admittance Valves.

Add Section as follows:

913.0 Air Admittance Valves

913.1 General. Vent systems utilizing Air Admittance Valves (AAV) shall comply with this section. Individual and branch-type air admittance valves shall conform to ASSE 1051. Stacking-type air admittance valves are prohibited.

913.2 Installation. The valves shall be installed in accordance with the requirements of this section and the manufacturer's instructions. Air admittance valves shall be installed after the required DWV testing has been performed.

913.3 Permitted Use. The use of AAVs shall be limited to the following circumstances:

913.3.1. Island Fixtures. Where a group of sinks and drains, not exceeding a total of 4 drainage fixture units, are remote from a wall extending to the ceiling.

913.3.2. Where a group of fixtures, not exceeding a total of 4 drainage fixture units, is more than a 30-foot horizontal radius from another plumbing fixture or plumbing vent of adequate size.

913.4 Where Permitted. Individual and branch-type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. Where the horizontal branch drain is located more than four stories below the top of a waste stack, the horizontal branch shall be provided with a relief vent that shall connect to a vent or extend outdoors to the open air. The relief vent shall connect to the horizontal branch drain between the waste stack and the most downstream fixture drain connected to the horizontal branch drain. The relief vent shall be sized in accordance with Section 904 and installed in accordance with Section 905. The relief vent shall be permitted to serve as the vent for other fixtures.

913.5 Location. Individual and branch-type air admittance valves shall be located not less than 4 inches above the horizontal branch drain or fixture drain being vented. The air admittance valve shall be located within the maximum developed length permitted for the vent. The air admittance valve shall be installed not less than 6 inches above insulation materials.

913.6 Access and Ventilation. Access shall be provided to all air admittance valves. Such valves shall be installed in a location that allows adequate volumes of air to enter the valve. AAVs installed in interior walls shall be provided with a removable grille/louver that is of adequate size to replace the valve through the opening.

913.7 Size. The air admittance valve shall be rated in accordance with the standard for the size of the vent to which the valve is connected and per the manufacturer's recommended sizing guidelines.

913.8 Vent Required. Within each plumbing system, not less than one vent shall extend through the roof in accordance with Chapter 9.

913.9 Prohibited Installations. Air admittance valves shall not be installed in non-neutralized chemical waste systems as described in Chapter 8. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves shall not be used to vent sumps or tanks except where the vent system for the sump or tank has been designed by an engineer. Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity air intakes or mechanical air intakes. Air admittance valves shall not be installed in cold attics, exterior walls, or where exposed to freezing temperatures. Air admittance valves shall not be installed within fire rated assemblies. Air admittance valves shall not be installed to vent water closets.

23.25. Table 1002.2 Horizontal Lengths of Trap Arms.

Add ** after "Horizontal Lengths of Trap Arms" and add below Table 1002.2 the following note:

** Trap arms for residential floor drains may be extended beyond the limits of Table 1002.2 to where they pass under the nearest wall before installing the required vent.

23.25.1007.1 General (Trap Seal Protection).

Add the following exception:

Exception: Floor drains in dwellings regulated by the International Residential Code.

23.25.1014.1.4 Hood washdown.

Add Section as follows:

1014.1.4 Hood washdown. Discharge from Type 1 hood washdown shall be discharged through an approved grease Interceptor in accordance with AWWU and AHJ requirements.

23.25.1014.1.5 Grease Producing Fixtures.

Add Section as follows:

1014.1.5 Grease Producing Fixtures. A grease interceptor shall be provided within 50 feet of grease producing fixtures.

23.25.1014.1.6 External Cleanouts.

Add Section as follows:

1014.1.6 External Cleanouts. Where hydromechanical grease interceptors are installed, an external manway shall be provided for cleaning of utility sewer piping. The manway shall be sized and installed in accordance with the utility requirements and the Authority Having Jurisdiction.

23.25.1014.1.7 Piping Slope.

Add Section as follows:

1014.1.7 Piping Slope. Drain piping upstream of the grease interceptor shall be sloped at a minimum of ¼-inch per foot of horizontal travel.

23.25.1017.3 Interceptor Details.

Amend item (5) by replacing "550 gallons" with "100 gallons".

23.25.1101.2 Where required.

Delete from the first sentence "or into a combined sewer system where a separate storm sewer system is not available."

Delete from the second sentence "In the case of one- and two-family dwellings," and "such as streets or lawns".

23.25.1101.4 Material uses.

Replace "Chapter 14 Firestop Protection" with "the International Building Code".

23.25.1101.6.1 Discharge (Subsoil drains).

Add the following to the beginning of the section:

When required by the authority having jurisdiction...

23.25.1101.7 Building subdrains.

Amend section 1101.7 by replacing "public sewer" with "storm drain".

23.25.1101.10 Filling stations and motor vehicle washing establishments.

Add to the beginning of the section:

When required by the authority having jurisdiction ...

23.25.1101.12.1 Primary roof drainage.

Replace the first sentence with the following:

Roof areas of a building shall be drained by roof drains, gutters, scuppers, or sheet flow off the edge of the roof.

23.25.1101.12.2.2 Combined system.

Revise 1101.12.2.2.2 to read as follows:

1101.12.2.2.2 Combined system.

The secondary roof drains may connect to the horizontal portion of the primary drain a minimum of 3 feet downstream from the primary drain. Additionally, an approved flexible connector shall be installed on each roof drain per the manufacturer's installation instructions or a swing joint configuration may be used (see detail "A" of MOA Handout P.02). When this combined system is used, an overflow line shall be installed in the drain line and run to the exterior of the building above grade to an appropriately designed overflow drain or scupper system to allow sheet flow from the drain line to surface in the case of a below grade freeze-up of the main drain line or storm main. The primary storm drainage system shall connect to an underground public storm sewer or discharge to an approved location.

23.25.1105.0 Controlled-flow roof drainage.

Delete section 1105.0.

23.23.1107.2 Methods of testing storm drainage systems.

Delete "except that plastic pipe shall not be tested with air" from the first sentence.

23.25.1207.2 Temporary gas installations—Permit required.

Add Section as follows:

1207.2 Temporary gas installations - permit required.

- A. Temporary gas approval is given to allow "comfort heating" appliances to be used to provide temporary heat to a building or building site prior to the completion of the building's primary heating system.
- B. The most commonly used appliance is a natural gas portable space heater. Other comfort heat appliances allowed for temporary heat purposes are warm air furnaces, boilers, and unit heaters. It is NOT the policy of the Building Safety Division or Enstar Natural Gas Company to allow "decorative fireplaces" or "ranges" to be utilized as temporary heat for buildings. These appliances are not designed or "listed" for such purpose.
- C. All appliances used to provide temporary heat for buildings shall be installed in accordance with the manufacturers' instructions and terms of their listing, with particular attention being paid to the

clearances to combustibles from the top, bottom, back, and sides of these appliances.

- D. Unit heaters used for temporary heat shall be installed per manufacturers' instructions and listed clearances to combustibles from the top, bottom, front, back, and sides of these appliances. The vent connector shall be graded at ¼-inch per foot slope upward to the outside and shall be changed to "B" vent at the wall penetration. The "B" vent must maintain its listed clearance to combustibles, extend a minimum of 5-feet vertically, and be secured.
- E. Furnaces used for temporary heat shall comply with the same requirements as for unit heaters as stated above. In addition, the return air for the furnace shall be ducted a minimum of 10-feet from the furnace.
- F. Portable space heaters shall be provided with one hundred percent outside air to the back end of the heater. In most cases, the gas regulator attached to these heaters shall be piped to the outside. the regulator vent shall not discharge into the space being heated.
- G. Gas hose used for temporary heaters shall be a type approved by the Building Safety Division and all manufacturers' listed clearances shall be maintained. The hose shall have an internal wire mesh or braid and be "kink proof". Supporting wire shall run the full length of the hose. Each time a hose is moved from one lot to another, it shall be retested with 60 psig air pressure.

23.25.1207.3 Temporary gas installations—Permit not required.

Add Section as follows:

1207.3 Temporary gas installations—Permit not required.

A permit and inspection shall not be required for residential temporary construction heat serving tented footings and foundations. This provision applies to thawing ground and curing concrete, not comfort heat for workers, such as plumbers installing underground. This allowance is limited to portable "SURE FLAME" type heaters and not intended for unit heaters, furnaces, and boilers with special venting considerations. All heaters and hoses shall be of the approved type. Heaters shall be listed by an approved listing agency. All hoses shall have an internal wire mesh or braid and be "kink proof". Supporting wire shall run the full length of the hose. One hundred percent outside air shall be provided to heater at all times. Listed clearances to combustibles shall be maintained. A licensed journeyman plumber or gasfitter shall perform all work.

23.25.1208.4.2 Medium pressure gas.

Add Section as follows:

1208.4.2 Medium pressure gas. The installation of a medium pressure gas system (2 psig or 5 psig) within a building must be pre-approved by the local gas utility. Steel piping shall be welded or press-connect fittings listed to ANSI LC-4/CSA 6.32 in accordance with UPC 1208.5. Test pressure for all medium pressure gas piping shall be 60 psig.

Exception: Medium pressure gas piping within mechanical rooms that house the equipment being served may be threaded in accordance with 1208.5. Threaded piping shall not be concealed within construction.

23.25.1208.4.3 CSST medium pressure gas.

Add Section as follows:

1208.4.3 CSST medium pressure gas.

The installation of a CSST medium pressure gas system (2 psig or 5 psig) within a building must be pre-approved by the local gas utility. Test pressure for all medium pressure gas piping shall be 60 psig. Joints shall be limited to the meter connection and appliance regulator being served. Intermediate joints are not allowed without prior approval.

23.25.1208.5.9.1 Pipe joints.

Add the following at the end of the paragraph:

All joints in underground ferrous piping shall be welded when any of the following conditions apply:

1. The nominal pipe diameter is 2½ inches or larger.
2. The pipe is installed under a driveway.
3. Medium pressure systems.

23.25.1208.5.9.2 Tubing joints.

Add the following sentences at the end of the paragraph:

All joints in underground copper shall be brazed with wrought copper fittings. No underground joints shall be permitted unless the underground length of run exceeds 60-feet. All pipe to tubing transitions shall be made above ground.

23.25.1208.5.9.5 Metallic pipe fittings.

Amend Item (2) by deleting "or cast iron".

Delete Item (5).

Add Item (10) as follows:

- (10) Right and left nipple couplings. Where unions are necessary, right and left nipples and couplings shall be used. Ground joint unions may be used at exposed fixture, appliance, or equipment

connections and in exposed exterior locations immediately on the discharge side of a building shutoff valve.

23.25.1208.7.2.1 Manufactured home connections.

Add Section as follows:

1208.7.2.1 Manufactured home connections. Pounds to inches water column regulators serving manufactured (mobile) homes shall be attached to the exterior of the home and shall not be located under the home.

23.25.1208.7.3 Regulator Protection.

Add to the end of the section:

When the regulator instructions do not specify an installation elevation, the regulator shall be installed 12 inches minimum above the anticipated snow depth to avoid the accumulation of snow and ice.

23.25.1210.1.1 Cover requirements.

Add the following sentence to the end of the paragraph:

Plastic and copper gas piping shall have at least 18 inches of earth cover or other equivalent protection.

23.25.1210.1.5 Piping through foundation wall.

Replace text with the following:

Building fuel gas piping entrances and exits shall be located above grade or in an approved vented vault.

23.25.1210.1.8 Ground penetrations.

Add Section as follows:

1210.1.8 Ground penetrations. At all points where fuel gas piping enters or leaves the ground there shall be installed, above ground, an approved or listed fuel gas piping connector capable of absorbing a 6-inch displacement in any direction, due to frost heave action. If the fuel gas riser is itself flexible, room for absorbing a 6-inch displacement shall be installed in lieu of using a connector for such means.

23.25.1210.1.9 Fuel gas piping connectors.

Add Section as follows:

1210.1.9 Fuel gas piping connections. Fuel gas piping connectors listed for outdoor use may be used between the meter and house main. No flex connector may pass through any wall, partition, panel, or other barrier. Solid fittings shall be used on each end.

23.25.1210.1.10 Frost heave protection for copper tubing.

Add Section as follows:

1210.1.10 Frost heave protection for copper tubing. At points where copper tubing type systems enter or leave the ground, they shall be protected from frost heave action by the incorporation of a suitable above ground 6-inch radius loop, or listed fuel gas piping connector of equal size.

23.25.1210.3.2 Building Structure.

Replace the last sentence with the following:

Cutting and notching of beams and joists shall be in conformance with the manufacturer's requirements or with the approval of a licensed design professional.

23.25.1210.3.5.4 Above-ground outdoor piping.

Add Section as follows:

1210.3.5.4 Above-ground outdoor piping. Piping installed outdoors shall be elevated not less than 5½ inches above ground or roof surface. Piping installed across a roof surface shall be securely supported and located where it will be protected from physical damage. Where passing through an outside wall, the piping shall be protected against corrosion by coating or wrapping with an inert material. Where piping is encased in a protective pipe sleeve, the annular space between the piping and the sleeve shall be sealed.

23.25.1210.3.6 Piping under exterior decks, porches, and walkways.

Add Section as follows:

1210.3.6 Piping under exterior decks, porches, and walkways. Piping that is run under the surface of any exterior platform (e.g. decks, porches, walkways) shall be CSST approved for outdoor use from the exterior face of structure to the termination point.

23.25.1212.1 Connecting Appliances and Equipment.

Replace item (1) as follows:

- (1) Rigid metallic pipe and fittings, excluding hanging appliances not otherwise restrained against lateral movement.

23.25.1301.6 Veterinary clinics.

Add Section as follows:

23.25.1301.6 Veterinary clinics. The material requirements, installation, and testing practices of NFPA 99 for Category 3 gas and vacuum systems shall apply to veterinary clinics except third party verification is not required and wet vacuum systems may be installed using schedule 40 PVC with pressure fittings.

23.25.1327.9 Vacuum systems for dental offices.

Add Section as follows.

1327.9 Vacuum systems for dental offices. The purpose of this amendment is to point out and clarify the requirements for wet vacuum systems in dental offices. Refer to NFPA 99 for full text on these requirements.

- A. Category 3 wet vacuum systems (in dental offices) may be installed using schedule 40 PVC with pressure fittings. Piping and fittings installed in plenums shall have a flame spread index of not more than 25 and a smoke developed rating of not more than 50.
- B. The wet vacuum system (in dental offices) is considered a Category 3 system if:
 - 1. The system is entirely separate from other Category 1 systems.
 - 2. The occupancy to be served and the function of the occupancy is distinct from other occupancies in the building.
 - 3. The patient population, during or subsequent to treatment, are not dependent for life on the vacuum system, and the treatment the facility performs may be completed without detrimental effect on patient outcomes in the event of sudden loss of vacuum systems.
- C. The wet vacuum system (in dental offices) shall be verified by a third party technically competent and experienced in the field of Category 3 vacuum systems and testing and meeting the requirements of ANSI/ASSE Standard 6030.

23.25 Appendices.

Adopt Appendices as listed in AMC 23.05.010. Local amendments to appendices as follows.

Section 7. Anchorage Municipal Code Chapter 23.30 is hereby repealed in its entirety and replaced with the following:

Chapter 23.30 LOCAL AMENDMENTS TO THE NATIONAL ELECTRICAL CODE

23.30.010 Local Amendments to the National Electrical Code.

The amendments to the National Electrical Code (NEC) 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.

23.30.020 Certificate of Fitness—Right to Inspection.

Municipal electrical inspectors may contact any electrical worker performing work for which a certificate of fitness is required by AS 18.62.070 and request the person to exhibit their certificate of fitness or trainee certificate of fitness. The inspector may immediately serve upon that person a notice to cease any further work in that occupation until the person has demonstrated possession of the required certificate.

23.30.100 Definitions.

Add the following definition to article 100: Kitchen.

Add the following sentence at the end of the definition: Microwaves that are not fastened in place do not constitute permanent provision for cooking.

23.30.110.21(A)(1) General.

Add to end of paragraph:

Equipment shall be marked with clear direction on any specific required replacement components (e.g., type of time delay fuses or GFCI protection).

23.30.210.8(B) Other Than Dwelling Units.

Replace in the first paragraph 100 amperes with 30 amperes. Delete item (10) in its entirety and replace with the following text:

(10) Garages, accessory buildings, service bays, Group F, M and S open areas of less than 5,000 square feet that include overhead doors where vehicles could be stored, and similar areas other than vehicle exhibition halls and showrooms.

23.30.210.8(F) Outdoor Outlets.

Replace Exception No. 2 with the following:

Exception No. 2: GFCI Protection shall not be required for listed HVAC equipment and well and septic equipment. This exception shall expire January 1, 2028.

23.30.210.12 Arc-Fault Circuit-Interrupter Protection (Dwelling Units).

In subsection (A), delete items (3) and (4).

In subsection (B), replace Exception No. 1 with the following:

Exception No. 1: AFCI protection shall not be required where an individual branch circuit supplies the following:

- A fire alarm system installed in accordance with 760.41(B) or 760.121(B).
- A dedicated appliance on a single rated receptacle yoke.

Branch circuits shall be installed in RMC, IMC, EMT, or steel-sheathed cable, Type AC or Type MC, meeting the requirements of 250.118, with

metal outlet and junction box. All circuits using this exception shall be clearly identified in the panel they originate from.

**23.30.210.23 Permissible Loads, Multiple-Outlet Branch Circuits
(Outlets Per Circuit).**

Add subsection (F) as follows:

(F) Outlets Per Circuit. In dwelling units, no more than (15) outlets are allowed on one branch circuit. All smoke detectors on a circuit may be counted as a total of one outlet. Appliance circuits are limited to six (6) duplex receptacles per circuit.

Exception: Fixed lighting circuits designed to meet the appropriate sections of the code.

23.30.210.52 Dwelling Unit Receptacle Outlets.

In section 210.52, add to the end of the first paragraph:

In existing dwellings when wall surfaces are removed or need to be repaired due to damage or remodel or when walls are added, removed or relocated, the electrical installations in the work area shall be installed to meet the current requirements of 210.52.

Replace subsection 210.52(C)(2) with the following:

(2) Island and Peninsular Countertops and Work Surfaces.

A minimum of one receptacle outlet shall be installed to serve island or peninsular countertops. This requirement applies to island or peninsulas with a dimension greater than 3 feet in any direction. The one required receptacle outlet shall comply with one of the following conditions:

(1) Located in accordance with 210.52 (C)(3).

(2) Installed not more than 12 inches below the countertop and not located where a countertop extends more than 6 inches beyond its support base.

Add subsection (J) as follows:

(J) Parking Spaces. For each dwelling unit and mobile home, there shall be at least one (1) exterior GFCI protected duplex receptacle outlet on a separate 20-ampere circuit adjacent to on-site parking locations. The conductors for the circuit shall be 10 AWG copper minimum.

Exception: For multi-family dwelling units, nine-plex and larger, the required number of exterior duplex receptacles on separate 20-ampere circuits may be reduced to a minimum of 50% of the total number of units or the number of parking spaces provided, whichever is less.

Add subsection (K) as follows:

(K) Under-Floor Crawl Spaces. A receptacle shall be provided in each unconnected space; the receptacle shall be located adjacent to a sump when one is provided. This receptacle shall be a GFCI protected duplex outlet.

23.30.210.63(B)(2) Indoor Equipment Requiring Dedicated Equipment Spaces.

Replace the text with the following:

Where equipment, other than service equipment, requires dedicated equipment space as specified in 110.26(E), the required receptacle outlet shall be located within the same room or area as the electrical equipment.

23.30.210.65(A) General.

Add "or training" after the "meeting" in the first paragraph.

23.30.210.65(B)(2) Floor Outlets.

Delete the paragraph in its entirety.

23.30.220.57 Electric Vehicle Supply Equipment (EVSE) Load.

Add to the end of the paragraph as follows:

Each dwelling unit shall have the 7200-watt EVSE continuous load included in the load calculations for the service, feeders and panels of less than 200 amps that would be supplying the EVSE. This applies to new Detached One- and Two-Family Dwellings or Townhouses if an EVSE is not being install at the time of initial construction.

23.30.225.31 Location.

Add the following text at the end of the paragraph:

Where the disconnect is located inside a commercial building an exterior mounted remote device shall be provided to actuate the interior disconnecting means. The control device shall meet the same requirements of NEC 230.71(A)(3).

23.30.230.1 Scope.

Add the following sentence:

The service installation shall also conform to the current written electric service requirements of the utility serving the area.

23.30.230.2(E) Identification.

Add the following text at the end of the paragraph:

Identification of the switching mechanism to be 8"x8" minimum with 1" minimum white lettering on red background and permanently affixed to enclosure or adjacent when too large for enclosure.

23.30.230.32 Protection Against Damage.

Add the following paragraph:

Physical protection of underground service laterals for residential services of 200 amperes and less shall consist of not more than nine feet of liquid tight flexible metal conduit.

23.30.230.70(A)(1) Readily Accessible Location.

Add the following paragraph:

The service disconnecting means for commercial facilities shall be lockable per 110.25 and operable from the exterior of the building if the service disconnect is within the building. A fire pump service disconnect is not required to be operable from the exterior of the building.

23.30.230.70(A)(3) Remote Control.

Replace subsection (3) with:

- (3) Remote Control. Where a remote-control device(s) is used to actuate the service disconnecting means, the service disconnecting means shall be located in accordance with section 230.70(A)(1). The control device shall meet the requirements of the electrical utility.
- Service disconnection by use of shunt trip device is acceptable. The shunt trip switch may be either the safety switch type or a switch inside an enclosure.
- Safety switch: Shall be suitable for the environment and be lockable in either the "on" or "off" position. Interlock contacts may be used to provide correct handle location. The "off" position must disconnect the power.
- Inside an enclosure: the shunt switch must be place within an enclosure suitable for the environment and the hinged cover. The enclosure shall be large enough for the required sign to be mounted on it. The enclosure must have a padlock hasp with the padlock accessible for removal with bolt cutters by emergency responders. No hardened steel shackles are permitted. Shackle diameter shall not exceed 5/16". The shunt trip switch shall be a maintained contact with "off" and "on" clearly identified. The "off" position must disconnect the power.

23.30.230.71(B) Two to Six Service Disconnecting Means.

Add subsection as follows:

- (7) combination multimeter panels with individual disconnects on multi-tenant and multi-dwelling structures.

23.30.250.53(D)(2) Grounding Electrode System Installation (Metal Underground Water Pipe - Supplemental Electrode Required).

Delete the exception.

23.30.250.68(C) Grounding Electrode Conductor and Bonding Jumper Connection to Grounding Electrodes (Grounding Electrode Connections).

Delete the exception under location (1).

23.30.250.118(A) Permitted (Types of Equipment Grounding Conductors).

Delete items (2) through (14) and replace with:

- (2) The copper sheath of mineral insulated, metal-sheathed cable Type MI.
- (3) Metal enclosures of busways listed for grounding.
- (4) Armor of Type AC cable as provided in 320.108.
- (5) Type MC cable that provides an effective ground-fault current path in accordance with one or more of the following:
 - (A) a. It contains an insulated or uninsulated equipment grounding conductor in compliance with 250.118(1).
 - (B) b. The combined metallic sheath and uninsulated equipment grounding/bonding conductor of inter-locked metal tape-type MC cable that is listed and identified as an equipment grounding conductor.
 - (C) c. The metallic-sheath and equipment grounding conductors of the smooth or corrugated tube-type MC cable that is listed and identified as an equipment grounding conductor.
- (6) Cable trays as permitted in 392.10 and 392.60.

23.30.250.122(B) Increased in Size.

Delete the exception and add the following to the end of the paragraph:

Increase in size shall not be required for circuits less than 100 feet in length. Circuits 100 amps or less may use the 60 degree C column for determining smallest conductor size with sufficient ampacity in accordance with section 110.14. Rounding up shall not be considered as the smallest conductor size with sufficient ampacity.

23.30.300.4(I) Protection Against Physical Damage (Roofs).

Add subsection (I) as follows:

- (I) Roofs. Raceways run on the surface of a roof or subject to damage from snow, ice, or foot traffic, shall be rigid metal or intermediate metal conduit only, and supported per NEC 344.30 and 342.30.

23.30.300.5 Underground Installations (Separation from Other Systems).

Add subsection (L) as follows:

- (L) Separation from Other Systems. When direct buried cables or conductors cross or are installed parallel to sewers, water lines, gas or other fuel lines, steam lines, communication and utility electric cables or conductors, a minimum 12-inch radial separation shall be maintained.

23.30.300.24 Cold Temperature Installations.

Add section 300.24 as follows:

300.24 Cold Temperature Installations. Thermoplastic type insulated wires or cables, or non-metallic tubing shall not be installed when ambient temperatures are less than 20° F.

23.30.314.27(C) Boxes at Ceiling-Suspended (Paddle) Fan Outlets.

Replace the text in the second paragraph with the following:

A minimum of one outlet box of any mounted in the ceilings of bedrooms, living rooms, family rooms, dens, sunrooms, and dining rooms of dwelling occupancies in a location more than 4 feet from adjacent walls and acceptable for the installation of a ceiling-suspended (paddle) fan shall comply with one of the following:

23.30.330.40 Boxes and Fittings.

Add section 330.40 as follows:

330.40 Boxes and Fittings. An insulated bushing shall be provided between the conductors and the outer metal sheath and must be visible for inspection.

23.30.334.10 Uses Permitted.

Replace permitted uses (2) and (3) with the following:

- (2) Multi-family dwellings of Type III, IV and V construction having wood-wall-stud framing.
- (3) AFCI protected branch circuits in Group R-1, R-2, R-3, R-4 and I-1 occupancies of Type III, IV or V construction having wood-wall-stud framing. Cables shall be concealed in walls, floors, or ceilings

that provide a thermal barrier of material that has at least 15-minute finish rating as identified in listings of fire-rated assemblies.

23.30.334.40(B) Devices of Insulating Material.

Replace section 334.40(B) with:

334.40(B) Devices of Insulating Material. Self-contained switches, self-contained receptacles, and nonmetallic-sheathed cable interconnector devices of insulating material that are listed shall be permitted to be used without boxes in exposed cable wiring and for repair wiring in existing buildings where the cable is concealed. Openings in such devices shall form a close fit around the outer covering of the cable, and the device shall fully enclose the part of the cable from which any part of the covering has been removed. Where connections to conductors are by binding-screw terminals, there shall be available as many terminals as conductors.

23.30.334.104 Conductors.

Replace section 334.104 with:

334.104. Conductors. The insulated power conductors shall be sizes 14 AWG through 2 AWG with copper conductors or sizes 10 AWG through 2 AWG with aluminum or copper-clad aluminum conductors. Circuits supplying receptacles shall be minimum size 12 AWG copper conductors or sizes 10 AWG with aluminum or copper-clad aluminum conductors. The communication conductors shall comply with Part V of Article 800.

23.30.410.17 Other Closet or Storage Spaces.

Add section 410.17 as follows:

410.17 Other Closet or Storage Spaces. Luminaires shall meet the location requirements for clothes closets or be of a totally enclosed fluorescent or LED type.

23.30.445.19 Emergency Shutdown of Prime Mover.

Add the following item (3) to subsection (A):

3. Emergency shutdown for commercial generator facilities that are not located immediately adjacent to the exterior power service equipment or feeder disconnect(s), a lockable emergency shutdown shall be located adjacent to the exterior disconnecting means. Each generator shut down shall be labeled denoting the system supplied. The emergency shutdown for the generator shall not be in the same enclosure as the utility power or other shutdown operators.

23.30.500.1 Hazardous (Classified) Locations.

Add the following informational note:

Informational Note: The requirement for elevation of ignition source in the International Mechanical Code 304.3 and the International Fuel Gas Code does not constitute a hazardous classification in accordance with this code. The requirement for elevation of ignition source may apply to both classified and unclassified areas. The requirement reads as follows:

IMC 304.3:

Elevation of ignition source. Equipment and appliances having an ignition source and located in hazardous locations and public garages, private garages, repair garages, automotive motor fuel-dispensing facilities and parking garages shall be elevated such that the source of ignition is not less than 18 inches above the floor surface on which the equipment or appliance rests.

IMC 304.3 MOA Amendment added to text:

Rooms and spaces that are not part of the living space of a dwelling unit shall include but not be limited to utility, storage, mud, laundry, toilet, and bathing rooms. Group F, M and S occupancies with open spaces less than 5,000 square feet that include overhead doors providing access to vehicles and equipment containing combustible fuel shall comply with this section. Communicating spaces separated by a door are not considered part of this space. Delete exception to IMC 304.3.

23.30.508 Lift Stations.

Add article as follows:

Article 508 Lift Stations

508.1 Definition. For the purposes of this article, a lift station is defined as an assembly designed to keep wastewater in a sealed environment, preventing exposure to the surrounding atmosphere.

508.2 Installation. Lift stations are required to be installed in accordance with NFPA 820. Lift stations that are not included in the scope of NFPA 820 shall be installed in accordance with the following requirements:

(A) Closed lift stations fed from 10 toilets or less and only other plumbing fixtures that have wet wells with submerged pumps are not classified. These system shall be considered closed sewage systems.

(B) Closed lift stations with flow rates of up to 5,000 gallons per day (GPD) that have wet wells with submerged pumps and the space above the well can be considered

unclassified where it is mechanically ventilated at a rate of 4 or more air changes per hour. These lift stations shall be in rooms specifically provided for enclosing the lift station and lift station access. No other equipment unrelated to the lift station shall be in this room. The GPD flow rate shall be based on table 2.4.2 Commercial Facilities in the 2024 State of Alaska DEC Onsite Wastewater System Installation Manual or shall be provided by an Alaska licensed mechanical or civil engineer.

(C) Closed lift stations not meeting A or B shall be considered at minimum Class 1, Division 1 in the wet well, and Class 1, Division 2 in the space above the wet well. The space above the wet well if it does not have larger than man-door access can be considered unclassified where it is mechanically ventilated at a rate of 6 or more air changes per hour.

23.30.511.3(C) Repair Garages, Major and Minor.

Add to the end of paragraph:

The use of mechanical ventilation at the rate of four or more air changes per hour in the table is not permitted.

The areas adjacent to classified spaces with doorways, separation for those spaces shall be by means of a vestibule providing a two-door separation.

23.10.30.511.3(D) Repair Garages, Major.

Add to the end of paragraph:

The use of mechanical ventilation at the rate of four or more air changes per hour in the table is not permitted.

The areas adjacent to classified spaces with doorways, separation for those spaces shall be by means of a vestibule providing a two-door separation.

23.30.511.3(E)(1) Specific Areas Adjacent to Classified Locations.

Replace subsection (1) with:

(1) Specific Areas Adjacent to Classified Locations. Areas adjacent to classified locations in which flammable vapors are not likely to be released such as offices, stock rooms, switchboard rooms, and other similar locations shall be unclassified where any of the following parameters apply:

(A) Adjacent areas less than 300 square feet and mechanically ventilated at a rate of four or more air changes per hour.

(B) Adjacent areas designed with positive air pressure.

(C) Adjacent areas effectively separated by unpierced walls or partitions. Doorways shall be by means of a vestibule providing a two-door separation.

23.30.513.3(D) Areas Suitably Separated and Ventilated.

Replace subsection (D) with:

(D) Areas Suitably Separated and Ventilated. Areas adjacent to classified locations in which flammable liquids or vapors are not likely to be released such as offices, stock rooms, electrical control rooms, and other similar locations shall be unclassified where designed with positive air pressure and effectively separated by unpierced walls. Doorways shall be by means of a vestibule providing a two-door separation.

23.30.517.10(B) Not Covered.

Under item (3) Areas used exclusively for any of the following purposes, delete items c) and d).

230.30.517.13(A) Wiring Method.

Add exception to (A):

Exception: shall not apply to Patient Care - Support (category 4) Space

23.30.620.22 Branch Circuits for Car Lights, Receptacle(s), Ventilation, Heating and Air-Conditioning.

Add the following to the end of (A):

If the elevator is powered by a generator these circuits shall also be fed by the generator.

23.20.620.23 Branch Circuits for Machine Room or Control Room/Machinery Space or Control Space Lighting and Receptacle(s).

Add the following paragraph to (A):

The separate circuits shall be one or more lighting circuits and one or more receptacle circuits that are separated from each other and from building circuits but may be comingled between machine room, control room, machine space, control space, hoist way and pit.

If the elevator is powered by a generator these circuits shall also be fed by the generator.

23.30.620.24 Branch Circuit for Hoist way Pit Lighting and Receptacles.

Add the following to (A):

The separate circuits shall be one or more lighting circuits and one or more receptacle circuits that are separated from each other and from building circuits but may be comingled between machine room, control room, machine space, control space, hoist way and pit.

If the elevator is powered by a generator, then these circuits shall also be fed by the generator.

23.30.620.51(D) Identification and Signs.

Add to the end of item (1) the following paragraph:

The disconnecting means shall be provided with a sign to identify the location of the supply side overcurrent protective device. Where there is more than one driving machine or motor controller in a machine room, machine space, control room or control space the disconnecting means shall be numbered to correspond to the identifying number of the driving machine they control.

23.30.620.71 Guarding Equipment.

Add the following to (A) Motor controllers:

Unless specifically addressed in the adopted elevator code (ASME A17.1), motor controllers that are recessed mounted in a wall with less than 1¼ inch clearance between the back of the cabinet and the inside surface of the wall sheathing shall be protected by 1/16-inch-thick steel plate, or equivalent. This plate is in addition the cabinet construction.

23.30.700.19 Multiwire Branch Circuits.

Add the following exception:

Exception: Existing installations on multiwire branch circuits where retrofit kits, unit equipment or same type replacements are installed, or no more than 6 new luminaires with associated branch wiring are added to each existing circuit.

23.30.702.5 Transfer Equipment.

Add the following subsection:

(E) Dwelling Unit Manual Transfer Switches.

Manual transfer equipment for portable generator use at dwelling units shall comply with items 1 or 2 below.

1. Feeder switching applications require installation of a listed, 3-pole transfer switch. The feeder neutral shall be switched or unswitched as required by the generator configuration. The transfer switch shall be labeled to match the generator configuration as required by 702.7(C). The service disconnect shall be labeled per 702.7(B) if applicable.

2. Single circuit switching applications require installation of listed, single-circuit transfer switches. Single circuit transfer switches shall not require provision to switch the neutral conductor.

Section 8. Anchorage Municipal Code Chapter 23.45 is hereby repealed in its entirety and replaced with the following:

Chapter 23.45 LOCAL AMENDMENTS TO THE INTERNATIONAL FIRE CODE

The amendments to the International Fire Code (IFC) are listed hereinafter 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.

23.45.106.2 Examination of Documents

Amend Section 106.2 by adding a new Section 106.2.2.1 as follows:

106.2.2.1 Fire system plans. Fire system plans shall be designed by a State of Alaska Fire System Permit Holder Level IC, IIC or IIIC in accordance with 13 AAC 50.027 or a professional fire protection engineer, mechanical engineer or electrical engineer registered under AS 08.48.

Plans shall include the following on each drawing:

1. Original signature and date on professional seal, or digital signature and date on professional seal.
2. State of Alaska Fire System Permit license number with permit level designation or Engineer license number; and date.

23.45.105.6 Required Construction Permits.

Change reference in Section 105.6 from "105.6.25" to "105.6.28."

Add subsection 105.6.26 as follows:

105.6.26 Energy Systems. A construction permit is required to install Energy Systems where required by Section 1203.2.

Add subsection 105.6.27 as follows:

105.6.27 Access Control Systems. A construction permit is required to install access control systems that delay egress or electrically locked egress doors.

Add subsection 105.6.28 as follows:

105.6.28 Modification of fire protection, gas detection, energy, access control or life safety systems. A construction permit is required to modify any fire protection, gas detection, energy, access control or life safety system as set forth in this section.

105.6.28.1 Fire protection, gas detection, energy, access control or life safety systems modified or repaired shall be in accordance with the requirements set forth in Section 105.6.28. Maintenance of fire protection, gas detection, energy, access control

or life safety systems, including like-for-like change of system devices totaling not more than 20% of the devices or equipment per floor or system whichever is less, do not require a permit unless specifically required by Section 105.6.28.

105.6.28.2 PERMITS.

105.6.28.2.1 General.

Permits shall be issued by the Fire Code Official. The building owner shall maintain a record of all system modifications in accordance with Section 901.6.3.

105.6.28.2.2 Plan review requirements.

Plan review shall be required, unless otherwise approved by the fire code official, whenever a system required by 105.7 is modified.

105.6.28.2.3 Permit requirements.

Whenever a permit is required by Section 105.6, a separate permit application shall be submitted along with all supporting documentation to the fire code official.

105.6.28.2.4 System modifications requiring a permit.

A permit shall be required in accordance with Sections 105.6.28.2.4.1 through 105.6.28.2.4.13.

105.6.28.2.4.1 New or replacement fire protection, energy or life safety system. A permit is required for all new and replacement fire protection, energy or life safety systems, whether the system is required or not.

105.6.28.2.4.2 Fire sprinkler and water-based systems. A permit is required for fire sprinkler and water-based systems under any of the following conditions:

- a. Relocation or addition of sprinkler heads to a system riser.
- b. Replacement of conventional sprinklers and piping with flexible piping and sprinklers.
- c. Changes to piping that require seismic bracing.
- d. Changes to the most demanding design density flow area.
- e. Increase to the building area and/or an increase to the system design density.
- f. High pile/rack storage sprinkler system modifications.
- g. Additions to an in-rack sprinkler system or a new in rack sprinkler system.
- h. Any change to an ESFR sprinkler system.
- i. Any change to a sprinkler system having a 0.2 gpm/sf or greater density.
- j. At the discretion of the fire official, sufficient changes to a system or occupancy/use that minimum design

density requirements and/or seismic bracing
requirements must be verified.

- k. Pipe schedule systems must have a plan review completed if the changes will affect pipe size anywhere other than on a branch line or any of the above requirements.
- l. Change out of dry or pre-action sprinkler valves.
- m. Changes to a sprinkler system with extended coverage heads.
- n. Changes to a sprinkler system with residential heads.

105.6.28.2.4.3 Backflow prevention device. A permit including drawings and hydraulic calculations shall be required for installation of a Backflow Prevention Device under the following conditions:

- a. A backflow prevention device installed on a water-based fire system that previously did not have a backflow device.
- b. Replacement of a backflow prevention device.
- c. Changing a backflow prevention device from a double check to a reduce pressure backflow device.
- d. Backflow prevention devices installed on tank supply lines.

105.6.28.2.4.4 Fire alarm system. A permit is required for fire alarm systems under the following conditions:

- a. Fire alarm control panel is replaced or upgraded.
Note that a full visual upgrade is required per the IFC Section 907.5.2.3, Exception 1.
- b. Any changes to a networked fire alarm system.
- c. Addition of a booster power supply.
- d. Addition of initiating/monitoring/control devices to a fire alarm system.
- e. Addition of fire alarm notification to any fire alarm system.
- f. Fire alarm panel replacement like-for-like.
- g. Installation of a communication device to transmit alarm, trouble, supervisory or other signals to a supervising station.

105.6.28.2.4.5 Kitchen hood fire systems. A permit is required for kitchen hood fire systems under the following conditions:

- a. Addition of nozzles to a system.
- b. Addition of agent cylinders.
- c. Addition of larger agent cylinder.

d. Installation of a relocated system.

105.6.28.2.4.6 Special hazard fire systems. A fire systems permit is required for special hazard fire systems under the following conditions:

a. Addition or modification to the system.

b. Installation of a relocated system.

105.6.28.2.4.7 Fire standpipe system. A fire systems permit is required for fire standpipe systems under the following conditions:

a. Addition or modification to the system.

105.6.28.2.4.8 Fire Pump. A fire systems permit is required for fire pumps under the following conditions:

a. Addition to the system.

b. Change out of the fire pump.

c. Change out of the fire pump controller.

d. Modifications to piping arrangements.

e. Change out or rebuilding of electric motor or diesel engine.

f. Changes to electrical service.

105.6.28.2.4.9 Gas Detection System. A permit is required for a gas detection system under the following conditions:

a. Changes to the approved or required detection levels.

b. Change out of the system controller.

c. Expansion of the system.

d. Modifications to detection coverage arrangement.

105.6.28.2.4.10 Energy System. A permit is required for an energy system under the following conditions:

a. Rebuilding of engine or generator unit.

b. Replacement of transfer switch.

c. Relocation of any wiring or equipment.

d. Change of fuel supply type or size.

e. Change to an energy system regulated under Section 1203.

105.6.28.2.4.11 Life Safety System. A permit is required for life safety systems as regulated by Chapter 9 under the following conditions:

a. Change out of the system controller.

b. Expansion of the system.

c. Modification to the system.

105.6.28.2.4.12 Access Control System. A permit is required for any modification to an access control system that has delayed egress or electronically controlled egress doors.

105.6.28.2.4.13 Demolition of Fire Protection System and

Life Safety System. A demolition permit is required for demolition or partial removal of any fire protection system and life safety system under the following conditions:

- a. Removal of fire protection system.
- b. Removal of gas detection system.
- c. Removal of energy system regulated under Section 1203.
- d. Removal of life safety system regulated by Chapter 9.

105.6.28.2.5 Retrofit Permits. Retrofit permits are limited to projects involving fire alarm, fire sprinkler and kitchen fire system where design is not required by Fire Code Official. Fire alarm, fire sprinkler and kitchen fire system retrofit permits are permitted to be used on the same project. Plan review is not required, and retrofit permits are limited in scope-of-work as follows:

- a. Relocation of 4 to 14 standard spray fire sprinkler heads.
- b. Addition of 3 to 6 standard spray fire sprinkler heads.
- c. Where 2 to 3 conventional sprinkler heads and piping are replaced with flexible piping and sprinkler heads.
- d. Addition of 3 to 10 initiation/monitoring/control devices to a fire alarm system.
- e. Addition of 2 to 5 notification devices of 75 candela or less to a fire alarm system.
- f. Kitchen hood fire system re-piping of the system for new appliance layout.
- g. Addition of up to 2 kitchen hood fire system nozzles with a maximum total of 3 nozzle flow points are allowed to be added to a system not exceeding maximum allowable flow points of the cylinder.

Fire alarm, fire sprinkler and kitchen fire systems exceeding the above listed parameters require design in accordance with Section 105.7. A commercial alteration permit is required.

105.6.28.2.5.1 Retrofit permit close out. Where changes are made to fire systems utilizing a retrofit fire system permit, the following actions shall be required by the company and individual making the changes to close out the permit.

1. Modifications shall have design and install oversight by a person holding a Level C State of Alaska Fire Systems Permit.

Exception: Sprinkler head additions shall be documented by a Level IIB or IIC State of Alaska Fire Systems Permit holder when the repairs are done per

the pipe schedule parameters set forth in NFPA 13.

Additions must be indicated on the original sprinkler plans that it was done per pipe schedule and does not exceed the limitations of a pipe schedule system.

2. A person holding a Level B or C State of Alaska Fire Systems permit shall make the changes.
3. The person making the changes shall submit an installer's certification letter to the permanent building fire system record located at the site where the installation was completed in accordance with Section 901.6.3 and a copy to the fire code official containing the following.
 - a. A diagram on 8 ½ x 11 paper of the changes made to the fire system.
 - b. Written description of the changes to the fire system. Included but not limited to battery calculations, sound pressure levels, system components compatibility, circuit capacity loads, wiring diagrams showing the connection between new and existing systems, piping diagrams, tank size with flow points used.
 - c. A statement verifying that the changes are in compliance with the appropriate standard/codes and manufacturer's installation manuals.
 - d. State of Alaska Fire System Permit number of person making made the changes.
 - e. Printed name and signature of the person performing the system modifications.
 - f. Printed name and signature of a level C State of Alaska Fire System permit holder certifying modification does not exceed system design limitations.
4. Completed installers certification shall be submitted to the fire code official at 907-343-8438 within 30 days of work completion.
5. Schedule a final inspection within 30 days of work completion. Inspections are permitted be closed out by the Fire Code Official without a physical inspection following receipt of Installer's Certification paperwork.

105.6.28.2.6 Fire systems not requiring permit.

A permit is not required for installations or modifications with work quantities less than specified in section 105.6.28. The following actions shall be required by the company/individual making the changes:

1. Modifications shall have design and install oversight by a person holding a Level C State of Alaska Fire Systems Permit.
Exception: Sprinkler head additions shall be documented by a Level IIB or IIC State of Alaska Fire Systems Permit holder when the repairs are done per the pipe schedule parameters set forth in NFPA 13. Additions must be indicated on the original sprinkler plans that it was done per pipe schedule and does not exceed the limitations of a pipe schedule system.
2. A person holding a Level B or C State of Alaska Fire Systems permit shall make the changes.
3. The person making the changes shall submit an installer's certification letter to the permanent building fire system record located at the site where the installation was completed in accordance with Section 901.6.3 and a copy to the fire code official containing the following.
 - a. A diagram on 8½ × 11 paper of the changes made to the fire system.
 - b. Written description of the changes to the fire system. Included but not limited to battery calculations, sound pressure levels, system components compatibility, circuit capacity loads, wiring diagrams showing the connection between new and existing systems, piping diagrams, tank size with flow points used.
 - c. A statement verifying that the changes are in compliance with the appropriate standard/codes and manufacturer's instructions.
 - d. State of Alaska Fire System Permit number of the person who actually made the changes.
 - e. Printed name and signature of the person who performed the system modifications.
 - f. Printed name and Signature of a level C State of Alaska Fire System permit holder certifying modification do not exceed system design limitations.
4. Completed installer's certification shall be submitted to the fire code official at 907-343-8438 within 30 days of work completion.

23.45.108.2 Schedule of permit fees

Add the following sentence to Section 108.2 to read as follows:

Life safety plan review and inspection fees, fire and life safety company registration fees, and fire and EMS personnel fees shall be

in accordance with this section.
Add the following sections to read as follows:

108.9 Life safety review and inspection fees. Life safety review and inspection fees other than those relating to fire permits associated with building permits and construction shall be assessed a base fee in accordance with Table 1-A and additional occupancy and use fee in accordance with Tables 2-A through 2-F. Reinspection fees shall be in accordance with Table 1-B.

108.9.1 Operational permit review. Applications for operational permits shall be submitted more than 10 business days prior to the event. Applications submitted 10 business days or less prior to the event may be accepted with fees in accordance with Table 1-A.

108.9.2 Progress inspections. Where the building owner or tenant provides evidence to the fire code official of progress abating outstanding code violations, the fire code official is authorized to conduct the inspection at no charge. Such inspections are limited to verify and document progress towards compliance.

108.9.3 Self inspections. Uses within Group R-2, R-3, and R-4 occupancies identified in Table 2-A may have the annual inspection requirements satisfied by the owner two out of three years by completing and submitting a self-inspection form provided by the fire code official. After being notified by the fire code official of an inspection, the owner shall conduct the inspection and correct all violations. The completed report shall be submitted to the fire code official. Fees for self-inspection forms shall be in accordance with Table 2-F.

108.9.4 Discounts. For Group B, F, M, and R occupancies, where there are zero violations, the fees shall be discounted 40 percent off the total fee.

108.10 Fire or life safety company registration fees. Fees for registration for service companies and monitoring companies shall be in accordance with Table 3.

108.10.1 Failure to register. Failing to register shall be subject to fines in accordance with Table 5.

108.11 Fire and EMS personnel and equipment at special events. Requests for fire or EMS personnel and equipment for non-municipal events shall be requested in writing prior to the event.

108.11.1 Submittal timeframe. Requests submitted more than 10 workdays in advance of the event shall be subject to a 2-hour minimum charge per person. Requests submitted 10 workdays or less in advance of the event shall be subject to a 4-hour minimum charge per person.

108.11.1.1 Personnel and equipment required. The number of personnel and equipment assigned to the event shall be at the sole discretion of the fire chief based on the following:

1. Size of the event
2. Number of participants and attendees
3. Alcohol service
4. Complexity
5. Adequacy of insurance coverage as confirmed by municipal risk management
6. Provisions for private or volunteer security personnel
7. Conditions or circumstances that potentially compromise health, safety, and welfare of participants and attendees, as well as the general public
8. Whether the event is held by a non-profit or for-profit entity

108.11.2 Fees. Where fire or emergency personnel and/or equipment are required at special events, fees shall be assessed in accordance with Table 4.

23.45.108 Table 1-A. Base fees

1. Base inspection fee	\$75.00
2. Operational permit review fee	\$175.00 per hour; if submitted 10 or less working days prior to the event an additional \$500.00 late fee shall apply.
3. Emergency shelter review and inspection	\$35.00; No other fees shall be applied
4. Inspections outside normal business hours	\$250.00 per hour; 2-hour minimum

23.45.108 Table 1-B. Reinspection fees

1. First reinspection	\$175.00
2. Second reinspection	\$350.00
3. Third and subsequent reinspection	\$500.00

23.45.108 Table 2-A. Residential occupancy inspection fees

1. Apartments with up to 6 units	\$18.00
2. Apartments with 7-20 units	\$36.00
3. Apartments with more than 20 units	\$72.00
4. Hotels/motels with up to 19 units	\$36.00
5. Hotels/motels with 20-99 units	\$120.00
6. Hotels/motels with more than 99 units	\$240.00
7. Dormitories with up to 19 units	\$36.00
8. Dormitories with 20-99 units	\$72.00
9. Dormitories with more than 99 units	\$120.00
10. Assisted living facilities with 3-5 residents	\$42.00
11. Assisted living facilities with 6-16 residents	\$72.00

23.45.108 Table 2-B. Non-residential occupancy inspection fees

1. Buildings/spaces with 1,000 to 1,999 sq. ft.	\$30.00
2. Buildings/spaces with 2,000 to 4,999 sq. ft.	\$42.00
3. Buildings/spaces with 5,000 to 9,999 sq. ft.	\$72.00
4. Buildings/spaces with 10,000 to 19,999 sq. ft.	\$120.00
5. Buildings/spaces with 20,000 to 49,999 sq. ft.	\$180.00
6. Buildings/spaces with 50,000 to 99,999 sq. ft.	\$240.00
7. Buildings/spaces with over 99,999 sq. ft.	\$360.00

23.45.108 Table 2-C. Special occupancy and operational permit inspection fees

1. Group A occupancies, including operational permit inspections	\$60.00
2. Group H occupancies	\$120.00

23.45.108 Table 2-D. Daycare facilities inspection fees

1. Single-family residences with up to 8 children operating between 6:00am and 10:00pm (no overnight care)	\$60.00
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2. All other daycare facilities	Per Table 2-B
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23.45.108 Table 2-E Fire protection systems report review fees

1. Initial review fire inspection notice	No fee
2. Report review follow-up	Per Table 1-B

23.45.108 Table 2-F. Residential occupancy self-inspection fees

1. Self-inspection reports submitted within 30 days	\$36.00; No other fees shall be applied
2. Self-inspection reports submitted 31-45 days	\$48.00; No other fees shall be applied
3. Reports submitted after 45 days	Per Tables 1-A through 2-D

23.45.108 Table 3. Registration fees

1. Fire or life safety service company	\$250.00 per year
2. Fire or life safety service company with a current municipal contractor's license	\$50.00 per year
3. Fire or life safety monitoring company	\$50.00 per year

23.45.108 Table 4. Fire and EMS personnel and equipment fees

1. Engine company standby for fireworks displays	\$150.00 per hour per person
2. EMS support standby	\$150.00 per hour per person
3. Activities occurring in municipal rights-of way under municipal permit	\$150.00 per hour per person

23.45.108 Table 5. Fines

1. Failure to complete inspections required by Section 901.6	\$1,000.00 per system that is more than 2 months past due
2. Failure to comply with a mandatory compliance date established by this code or by letter of agreement with the fire code official	\$250.00 per day past the established compliance date
3. Failure to submit inspection reports for fire or life safety systems within the timeframes specified in Appendix I	\$100.00 per day late for Status 1 reports \$50.00 per day late for Status 2 reports \$25.00 per day late for Status 3, Status 4, and corrective service reports
4. Failure of fire or life safety monitoring companies to register as required by Section 901.11	\$1,000.00 for the first offense \$2,000.00 for subsequent offenses within a 5-year period
5. Failure of fire or life safety service companies to register as required by Section 901.12	\$1,000.00 for the first offense \$1,000.00 additional if not registered within 90 days after past due notification

	\$3,000.00 additional if not registered within 180 days after past due notification \$3,000.00 additional for every 90 days thereafter
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23.45.202 General Definitions.

Amend Section 202 by adding the following definitions:

DRIVEWAY. A vehicular ingress and egress route that serves no more than two buildings, not including accessory structures, or more than five dwelling units.

LIMITED ACCESS ROADWAY. A vehicular ingress and egress route located in a right-of-way that serves no more than four single-family dwelling units or lots.

23.45.401.3 Emergency responder notification.

Amend by adding Section 401.3.4 to read as follows:

401.3.4 False alarm charges. The owner of a building containing a fire alarm or fire protection systems shall pay a charge in accordance with AMC Section 14.70.190 for false alarms to which the fire department responds. As used in this Section, "false alarm" means an alarm signal generated by a fire alarm system reporting an alarm for which no fire or emergency actually exists, and includes system malfunctions, faulty operation of detectors, and false alarms not classified above. It does not include incidents where the detector or system operated as designed, such as but not limited to, a smoke detector sounding from someone smoking under the detector or a manual pull station being pulled.

23.45.403.1 General.

Amend Section 403.1 to change "403.11.3.3" to "403.12.4.3".

23.45.403.9.3 Group R-3 custodial care/assisted living facilities and Group R-4 occupancies.

Replace Section 403.9.3 with:

403.9.3 Group R-3 custodial care/assisted living facilities and Group R-4 occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-3 custodial care/assisted living facilities and Group R-4 occupancies. Group R-3 custodial care/assisted living facilities and Group R-4 occupancies shall comply with Sections 403.9.3.1 through 403.9.3.6.

23.45.403.12 Occupants needing physical assistance.

Add Section 403.12 as follows:

403.12 Occupants needing physical assistance. Facilities housing occupants needing physical assistance shall comply with this Section.

403.12.1 Applicability. The provisions of this Section apply to Group I-1 Institutional and Group R-3 Custodial Care/Assisted Living Facilities and Group R-4 facilities where the occupants require physical assistance from staff or others to respond to an emergency.

403.12.2 Definitions. The following terms and definitions are to be utilized for occupants needing physical assistance, section 403.12.

Evacuation capability means the ability of occupants, residents, and staff as a group either to evacuate a building or to relocate from the point of occupancy to a point of safety.

Point of safety means a location (a) exterior to and away from a building or (b) within a building of any type construction protected throughout by an approved automatic sprinkler system and is either (1) within an exit enclosure meeting the requirements of Section 1022 or (2) within another portion of the building separated by smoke partitions meeting the requirements of IBC Section 710 with not less than one-half hour fire resistance rating, and the portion of the building has access to a means of escape or exit conforming to the requirements of this code and does not require return to the area of the fire.

Prompt evacuation capability means a group has the ability to move reliably to a point of safety in a manner equivalent to the ability of a household in the general population as measured under Section 403.12.3.

Slow evacuation capability means a group has the ability to move reliably to a point of safety in a manner not as rapid as members of a household in the general population, as measured under Section 403.12.3.

Impractical evacuation capability means a group does not have the ability to reliably move to a point of safety in a timely manner as measured under Section 403.12.3.

403.12.3 Fire drills. A fire drill conducted by the Fire Code Official or other approved agencies that have oversight of the licensee shall make the initial determination of evacuation capability. Changes to the evacuation capability shall be based on a record of drills conducted by the facility and recorded for review by the Fire Code Official or other approved agencies that have oversight of the licensee.

Fire drills with all occupants participating shall be conducted six (6) times a year on a bimonthly basis, with at least two (2) drills conducted during the night when residents are sleeping. Records

shall indicate the time taken to reach a point of safety, date and time of the drill, location of simulated fire origin, escape paths used. Residents who resisted or failed to participate in the drills shall be classed as impractical capability and corrected per 403.13.4.3. The relation of drill time to evacuation capability is as follows:

1. Three (3) minutes or less - prompt;
2. Over three (3) minutes but under 14 minutes - slow; or
3. Fourteen (14) minutes or more - impractical.

403.12.3.1. In Group R-3 care facilities, no more than 1 person can refuse to evacuate. The person who refuses to evacuate shall be relocated to the level of exit discharge. The facility shall have a manual fire alarm system with automatic smoke detection installed complying with AMC 23.45.907.2.24 for Group R occupancies.

403.12.3.2. In Group R-4 and I-1 care facilities, no more than 2 people can refuse to evacuate. The people who refuse to evacuate shall be relocated to the level of exit discharge. Facilities with an automatic sprinkler system not connected to the municipal water supply shall have a 30-minute water supply with pump connected to standby power complying with Chapter 12 of the International Fire Code and a fire department connection.

403.12.4 Evacuation capability and fire protection requirements. Evacuation capability and fire protection requirements of a facility under this Section are as follows:

403.12.4.1 Prompt evacuation capability. Evacuation capability of three minutes or less indicates prompt evacuation capability. Facilities maintaining prompt evacuation capability are considered to be in compliance with this code.

403.12.4.2 Slow evacuation capability. Evacuation capability of more than three but less than 14 minutes indicates slow evacuation capability. Facilities maintaining slow evacuation capability shall be protected by an automatic fire sprinkler system in accordance with Section 903. Additionally, Group I-1 and R-4 facilities maintaining slow evacuation capability shall be protected by an automatic smoke detection system using addressable smoke detectors in accordance with the provisions of this code.

403.12.4.3 Impractical evacuation capability. Evacuation capability of fourteen minutes or more indicates impractical

evacuation capability. Impractical evacuation capability is not allowed and must be corrected immediately with additional staff or relocation of residents to an appropriate facility that can meet the level of care required.

23.45.503.7 Driveways.

Add Section 503.7 as follows:

503.7 Driveways. Driveways shall be provided when any portion of an exterior wall of the first story of a building is located more than 150 feet from a fire apparatus access road. Driveways shall comply with Sections 503.7.1 through 503.7.3.

Exception: Where driveways cannot be installed because of topography, railways, waterways, non-negotiable grades or other similar conditions, the fire code official is authorized to require additional fire protection.

503.7.1 Dimensions. Driveways shall provide a minimum unobstructed width of 12 feet and a minimum unobstructed height of 13 feet 6 inches.

503.7.2 Turnarounds. Driveways with a dead-end length in excess of 150 feet shall be provided with a turnaround. The design for driveway turnarounds shall be in accordance with Section D103.1 unless otherwise approved by the fire code official.

Exception: Driveways serving one- and two- family dwellings with a dead-end length less than or equal to 250 feet shall not require a turnaround.

503.7.3 Turnouts. Driveways in excess of 200 feet in length and less than 20 feet in width shall be provided with a turnout in addition to any required turnaround. Turnouts shall be a maintainable road surface at least 10 feet wide and 30 feet long. Turnouts shall be located as required by the fire code official.

23.45.506.1.2 Key boxes for nonstandardized fire service elevator keys.

Revise the wording in Item 1 to read as follows:

The key cylinder for the Elevator key box shall be of a tubular, 7 pin, style 137 construction and shall have a bitting code of 6143521 starting at the tab sequenced clockwise as viewed from the barrel end of the key. The key shall be coded "FEO-K1".

23.45.507.1 Required water supply.

Amend Section 507.1 by adding the following exception:

Exception: In areas of the jurisdiction not served by a water utility, the following structures do not require a water supply:

1. Detached one- and two-family dwellings, townhouses and related accessory structures;
2. Structures accessory to detached one- and two-family dwellings and regulated by the International Residential Code having 3,000 square feet or less gross floor area;
3. Structures classified as a Group U occupancy in accordance with the International Building Code having 3,000 square feet or less gross floor area;
4. Structures classified as a Group U occupancy in accordance with the International Building Code in excess of 3,000 square feet of gross floor area and protected throughout by an approved automatic fire sprinkler system;
5. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type I-A or I-B construction in accordance with the International Building Code;
6. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type II-A construction when Type II-B construction is allowed based on occupancy classification, allowable height and allowable area in accordance with the International Building Code;
7. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type III-A construction when Type III-B construction is allowed based on occupancy classification, allowable height and allowable area in accordance with the International Building Code; and
8. Buildings protected throughout by an approved automatic fire sprinkler system and constructed of Type V-A construction when Type V-B construction is allowed based on occupancy classification, allowable height and allowable area in accordance with the International Building Code.

23.45.604.6.1 Elevator key location.

Amend by adding the following language to 604.6.1:

New and existing elevators shall be provided with a Knox Box 1400 Series Elevator Box. The keys to be provided in the elevator key box shall include but are not limited to; the machine room/space or control room/space keys (as is applicable to the elevator(s) in each building), the proper hoist way door unlocking device keys for the particular vintage of elevator or bank of elevators, a fire service key for each phase-I and phase-II switch, a key to the auxiliary power selector switch (if present), stop/run keys (if present), and all other keys located in the elevator car operating panels, such as the fans, lights, floor lockouts and service cabinet. All keys shall be marked for their intended use.

23.45.606.3.3.2 Grease accumulation.

Revise Section 606.3.3.2 to read as follows:

23.45.606.3.3.2 Grease accumulation. If during the inspection it is found that hoods, grease-removal devices, fans, ducts or other appurtenances have an accumulation of grease, those components shall be cleaned in accordance with NFPA 96 or ANSI/IKECA C10 for cleaning only.

23.45.901.6.3 Records.

Amend Section 901.6.3 by adding the following to the end of the Section: Records shall be copied to the fire code official in accordance with Appendix I.

23.45.901.6 Inspection, testing and maintenance.

Amend 901.6 by adding Section 901.6.4 as follows:

901.6.4 Sound level check. The fire alarm sound pressure levels shall be checked annually in Group R and I-1 occupancies in the following locations:

1. Common areas.
2. Sleeping areas, a minimum of 15% of the units per floor with a minimum of 2 units per floor.

23.45.901.11 Registration of monitoring company.

Add Section 901.11 as follows:

901.11 Registration of monitoring company. All companies that provide Central Station Service, Proprietary Supervision Station or Remote Supervising Station alarm monitoring, as required by IFC, IBC and NFPA 72, shall annually register with the Anchorage Fire Department Fire Prevention Division. A company failing to register shall be subject to fines AMC Title 23.15.108 Table 5 #5.

23.45.901.12 Registration of fire and life safety company.

Add Section 901.12 as follows:

901.12 Registration of fire and life safety company. A company that performs inspection(s), install, repairs or maintains a fire protection system or life safety system shall register with the Anchorage Fire Department Fire Prevention Division on an annual basis. A company failing to register shall be subject to fines AMC Title 23.15.108 Table 5 #4.

23.45.903.2.3 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.

23.45.903.2.8 Group R.

Add Section 903.2.8 as follows:

23.45.903.2.8.4 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.

23.45.903.2.11 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.

23.45.903.3 Installation requirements.

Amend 903.3 by changing "903.3.9" to "903.3.10".

23.45.903.3.1.3 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.

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.

23.45.903.3.5 Water supplies.

Add 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.

23.45.903.3.10 Seismic Design.

Add Section 903.3.10 as follows:

903.3.10 Seismic Design. Fire sprinkler systems shall have a minimum seismic design coefficient C_p of 0.72 or greater as by NFPA 13.

23.45.903.4.1 Electronic Supervision

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

23.45.907.2 Where required - new buildings and structures.

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

23.45.907.2.1 Group A.

Delete Exception 1

23.45.907.2.2 Group B.

Delete Exception.

23.45.907.2.3 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 907.2.11.2.

Delete Exceptions 3 and 4.

23.45.907.2.6 Group I

Amend Section 907.2.6 last sentence as follows.

An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2, 907.2.6.3.3 and 907.2.6.4.

Add subsection 907.2.6.4 as follows:

907.2.6.4 Group I-4 An automatic smoke detection system shall be installed in common areas and sleeping rooms.

23.45.907.2.4 Group F.

Delete Exception.

23.45.907.2.7.1 Group M.

Delete Exception 2.

23.45.907.2.8.1 Group R-1: Manual fire alarm system.

Delete Exception 2.

23.45.907.2.9.1 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.

23.45.907.2 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.

23.45.907.2.10.1 Public- and self-storage occupancies (Group S).

Delete Exception.

23.45.907.5.2.1 Audible alarms.

Add subsection as follows:

907.5.2.1.4 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.

23.45.907.5.2.2.6 Speech Intelligibility.

Add Section 907.5.2.2.6

907.5.2.2.6 Speech Intelligibility. Emergency voice/alarm communications system shall be designed and tested to NFPA 72 Annex D.

23.45.907.5.2.3 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.)

23.45.907.6.1 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.

23.45.907.6.2 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.

23.45.907.6.6 Monitoring.

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

23.45.1007.1.2 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.

23.45.1010.2.6 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.

23.45.1103.1 Required construction.

Amend Section 1103.1.

Replace 1103.10 with 1103.12.

23.45.1103.5.3 Group I-2, Condition 2.

Replace "as established by the adopting ordinance" with "by January 1, 2022."

23.45.1103.5 Sprinkler systems.

Replace "1103.5.5" with "1103.5.8".

Add new subsections as follows:

1103.5.6 Group E occupancies. An approved automatic fire extinguishing or sprinkler system shall be installed throughout an existing building containing a Group E occupancy having an occupant load of 50 or more in

accordance with Section 903.2.3, as amended, whenever alterations involving the reconfiguration of space, or additions are made to the Group E occupancy.

1103.5.7. Group R-4 and I-1 care facilities. Facilities that have impractical evacuation capabilities with an automatic sprinkler system not connected to the municipal water supply shall have a 30-minute water supply with pump connected to standby power complying with Chapter 12 of the International Fire Code and a fire department connection.

1103.5.8 Pit sprinklers. In buildings that contain a fire sprinkler system, sprinklers shall be installed in the bottom of all existing elevator pits below the lowest projection of the elevator car but no higher than 24" from the bottom of the pit.

23.45.1103.7 Fire alarm systems.

Amend Section 1103.7 by adding the following to the end of the exception: "...meeting a minimum sound pressure level of 65 dBA in Group R and I-1 occupancies and 60 dBA in Group E, I-2, and I-3 occupancies."

23.45.1103.7.5.1 Group R-1 hotel and motel manual fire alarm system.
Delete Exception # 2 and 3.

23.45.1103.7.7 Group R-3 Assisted Living and Custodial Care Facility.
Add Section as follows:

1103.7.7 Group R-3 Assisted Living and Custodial Care Facility.
Facilities that have impractical evacuation capability shall have a manual fire alarm system with automatic smoke detection installed complying with AMC 23.45.907.2.24 for Group R-4 occupancies.

23.45.1103.8.1 Where required.

Amend Section 1103.8.1 by deleting Exception Nos. 1 and 2.

23.45.1103.11 Monitoring.

Add Section 1103.11 as follows:

1103.11 Monitoring. Monitoring shall be provided for all existing occupancies with fire sprinkler or fire alarm systems. Fire sprinkler system monitoring shall comply with Sections 903.4 and 903.4.1. Fire alarm monitoring shall comply with Section 907.6.6.

23.45.1103.12 Group I-1, R-3 and R-4 occupancies.

Add 1103.12 as follows:

1103.12 Group I-1, R-3 and R-4 occupancies. An automatic fire sprinkler system shall be installed throughout all existing Group I-1 facilities, and

Group R-3 and R-4 custodial care/assisted living facilities in accordance with Section 903 of this Code.

23.45.1203.4.3 Records

Amend Section 1203.4.3 by adding the following to the end of the Section: Records shall be copied to the fire code official in accordance with Appendix I as amended.

23.45.1205.2.1 Solar photovoltaic systems for Group R-3 buildings.

Add the following exception:

3. Roof access, pathways and setback requirements do not apply to photovoltaic systems installed on a single roof plane of a building having multiple roof planes where such roof plane is not located below or provide access to an emergency escape and rescue opening.

23.45.1205.2.1.2 Setbacks at Ridge

Amend Section 1205.2.1.2 to read as follows:

For photovoltaic arrays occupying not more than 33 percent of the plan view total roof area, provide one of the following: not less than 18-inch clear setback on both sides of the ridge or not less than a 36-inch clear set back on one side of the ridge. For photovoltaic arrays occupying more than 33 percent of the plan view total roof area, provide one of the following: not less than 36-inch clear setback on both sides of the ridge or not less than a 48-inch clear set back on one side of the ridge.

23.45.2006.3 Construction of aircraft-fueling vehicles and accessories.

Revise 2006.3 by adding Exceptions to read:

- Exception:** A vehicle or trailer tank with a capacity of 500 gallons or less may be used for non-commercial refueling of private non-commercial aircraft provided:
1. The tank is placarded with no smoking signs, the type of fuel contained in the tank, and the tank capacity.
 2. The tank and all appurtenances used in the fueling operation are listed and approved for the specific purpose.
 3. Electrical bonding is provided as required under Section 2006.3.7.
 4. Two (2) listed portable fire extinguishers complying with Section 906, each having a minimum rating of 20-B:C are provided. A portable fire extinguisher shall be readily accessible from either side.

23.45.3103.4 Use period.

Add an exception to read as follows:

Exception: Seasonal Use Structures permitted under AMC
23.10.104.3.

23.45.3108.12 Heating and cooking equipment.

Amend 3107.12 by adding at the end of the sentence:
"unless as otherwise approved by the fire code official."

23.45.4104.2 Open-flame cooking devices.

After the word "operated" add "or stored".
After the words "combustible balconies" add "and decks".

23.45 Chapter 80 Referenced standards.

Amend the Reference Standards as follows:

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

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

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

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

Change NFPA 24-22 to NFPA 24-25 Standard for the installation of Private
Fire Services Mains and their Appurtenances.

Change NFPA 25-23 to NFPA 25-26: Standard for the Inspection, Testing
and Maintenance of Water-based Fire Protection Systems.

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

Change NFPA 2001-22 to NFPA 2001-25 Standard on clean Agent Fire
Extinguishing Systems.

Add NFPA 291-25 Recommender Practice for Fire Flow Testing.

23.45 Appendices.

Adopt Appendices as listed in AMC 23.05.010. Local amendments to
appendices as follows.

**23.45.B105.1 One- and two-family dwellings, Group R-3 and R-4
buildings and townhouses.**

Amend Section B105.1 by adding the following exception:

Exception: Buildings protected throughout with an approved automatic
fire sprinkler system.

**23.45.B105.2 Buildings other than One- and two-family dwellings,
Group R-3 and R-4 buildings and townhouses.**

Amend Section B105.2 by adding the following exception:

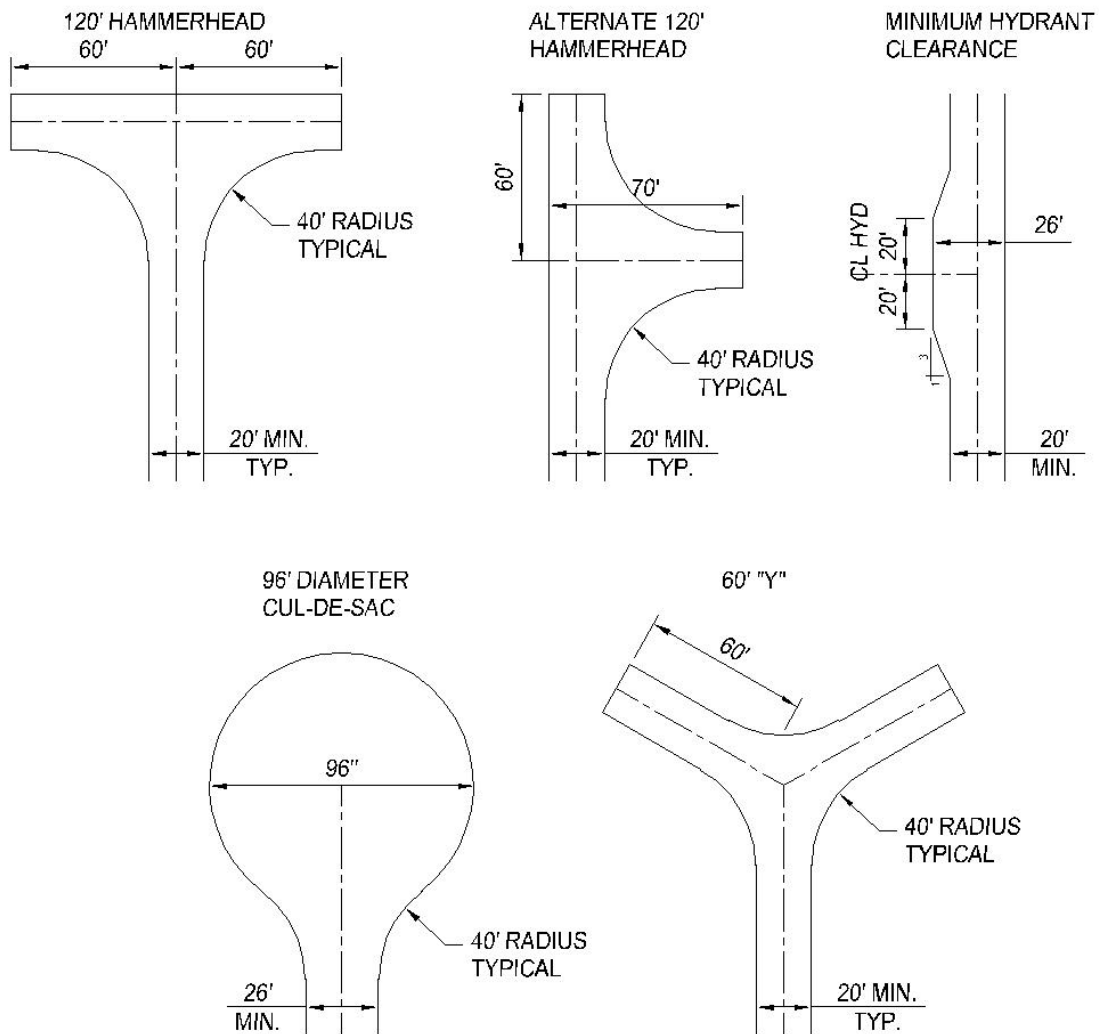
Exception: Group U occupancies and structures accessory to other
than Group I occupancies, not having more than 3,000 square feet of
fire flow area.

23.45.D102.1 Access and loading.

Amend Section by deleting 75,000 pounds and replacing it with 80,000
pounds.

23.45.D103.1 Access Road Width with a hydrant

Delete Figure D103.1 and replace with the following figure:



NOTE: 20' WIDTH MAY BE REDUCED TO 12' WIDTH FOR RESIDENTIAL DRIVEWAYS

FIGURE D103.1 DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

23.45.D103.2 Grade.

Replace both instances of "10 percent" with "12 percent."

23.45.D103.4 Dead ends.

Amend Section D103.4 by adding the following exception:

Exception: For one- and two-family dwellings, only dead-end fire apparatus access roads in excess of 250 ft. shall be provided with turnaround provisions in accordance to Table D103.4.

23.45. Appendix I Fire Protection Systems - Noncompliant Conditions.

Delete I102 Referenced Standards and replace with the following:

**23.45.I102 FIRE, GAS DETECTION, ENERGY SYSTEMS AND LIFE
SAFETY SYSTEMS STATUS REPORTING.**

I102.1 Scope.

Fire, gas detection, energy and life safety system service reports shall be in accordance with this appendix and all other applicable requirements of the International Fire Code, NFPA Standards, Manufactures instructions and other governing codes.

I102.2 Definitions.

For the purpose of this appendix, certain terms are defined as follows:

Status 1 - Impairment/Out of order. A condition where a fire, gas detection, energy or life safety system or portion thereof is out of order, and the condition can result in the fire, gas detection, energy or life safety system not functioning in an event.

Status 2 - Critical Deficiency. A deficiency that, if not corrected, can have a material effect on the ability of the fire, gas detection, energy, or life safety system, to function as intended in an event.

Status 3 - Noncritical Deficiency. A deficiency that does not have a material effect on the ability of the fire, gas detection, energy or life safety system to function in an event, but correction is needed to meet the requirement of fire, gas detection, energy or life safety standard, manufactures instructions or other governing codes for the proper inspection, testing and maintenance of the system or unit.

Status 4 - No Deficiencies. The fire, gas detection, energy or life safety system is operational with no impairment, critical or noncritical deficiencies.

I102.3 Reporting of Fire, Gas Detection, Energy and Life System Inspections.

A report shall be generated for all Fire, Gas Detection, Energy and Life Safety Systems. Inspections and Corrective Action repair/corrections provided within the Building Safety Service Area. The providing entity/company shall send a legible copy of the report, including observation reports, suggestions, notes, etc., to the Division of Fire Prevention, Anchorage Fire Department or appointed fire department representative. Said report shall contain the following information per I102.3.1 through I102.3.4.

I102.3.1 Requirement for 1st page of inspection report.

- a. Service company.
 - i. Name.
 - ii. Address.
 - iii. Phone Number.

- b. Service location.
 - i. Property management company or owners name.
 - a. Point of contact name.
 - b. Phone number.
 - c. Address.
 - d. Email address.
 - ii. Inspected property.
 - a. Building name.
 - b. Address.
 - c. Point of contact name.
 - d. Phone number.
 - e. Email address.
- c. Date of Inspection.
- d. Inspection Type:
 - i. Fire Alarm.
 - ii. Fire Sprinkler.
 - iii. Fire Pump.
 - iv. Generator, emergency or legally required standby.
 - v. Gas Detection.
 - vi. Life Safety System.
 - vii. Kitchen Fire System.
 - viii. Other inspections not addressed.
- e. Inspection Frequency:
 - i. Annual.
 - ii. Semi-annually.
 - iii. Quarterly.
 - iv. Monthly.
 - v. Other frequencies not addressed.
- f. Building occupancy type as shown in 2018 IBC Section 202.
- g. Inspector Information.
 - i. First and last name.
 - ii. Email address.
 - iii. Cell phone number.
 - iv. State of Alaska Fire System Permit number issued under 13 AAC 50.035.
 - v. Certification number for other systems.
- h. System Status Number.
 - i. Determined System Status Number shall be located on the 1st page in the upper right corner.
 - ii. System Status Number 1, 2, 3 or 4 shall be determined in accordance with Section I102.4.
- i. Deficiencies.

- i. Typed or legibly handwritten (no cursive/long hand handwriting).
- ii. Deficiency write-ups must include the code citation in violation and a description of the problem.
- iii. All deficiencies shall be listed together on the report.
- j. Only white or yellow copies will be accepted for submitted reports.

I102.3.2 Requirement for additional pages of the inspection report.

- a. Building name (located on top of the report page).
- b. Date of service (located on top of the report page).

I102.3.3 Requirement of Corrective Actions reports.

- a. Service Company.
 - i. Name.
 - ii. Address.
 - iii. Phone number.
- b. Service location.
 - i. Building name.
 - ii. Address.
 - iii. Point of contact name for the property management company or owner.
 - iv. Phone number.
 - v. Email address for the property management company or owner.
- c. Date of Repairs.
- d. Repairs or corrections.
 - i. List items repaired or corrected.
 - ii. List any items not repaired or corrected.
- e. System Status after repairs are made.
 - i. Determined System Status Number shall be located on the 1st page in the upper right corner.
 - ii. System Status Number 1, 2, 3 or 4 shall be determined in accordance with Section I102.4.
- f. Copy of the original inspection report.
- g. Corrective service reports shall be submitted to Anchorage Fire Department Fire Prevention within 14 days after corrective service has been completed.
Email: fireprevention@muni.org or Assigned Fire Inspector.

I102.3.4 Requirement for sound level check inspection report.

- a. Service company.
 - i. Name.

- ii. Address.
- iii. Phone Number.
- b. Service location.
 - i. Property management company or owners name.
 - a. Point of contact name.
 - b. Phone number.
 - c. Address.
 - d. Email address.
 - ii. Inspected property.
 - a. Building name.
 - b. Address.
 - c. Point of contact name.
 - d. Phone number.
 - e. Email address.
- c. Date of Inspection.
- d. Inspection Type:
 - Decibel - Sound Level check.
- e. Inspection Frequency:
 - i. Annual.
 - ii. Other frequencies not addressed.
- f. Test areas.
 - i. Common area locations.
 - ii. Sleeping area locations - Minimum of 15% of the units. per floor with a minimum of 2 units per floor.
- g. Sound meter information.
 - i. Sound meter make and model meeting the requirements of ANSI S1.4 Type 1.
 - ii. Serial number.
 - iii. Annual calibration date.

I102.3.5 Failure to Report.

Any company, individual or entity failing to file reports in the required times as required in Appendix I102 shall be subject to AMC Title 23.15.108 Table 5 #3.

I102.4 System Status:

I102.4.1 Status 1 - Impairment/Out of Order. Systems out of service or having identified major deficiencies shall be reported as Status 1. The service company shall immediately contact the Division of Fire Prevention at 267-4901, if the system cannot be returned to service. After-hours or on weekends, contact AFD dispatch at 267-4950. Written notification shall be emailed to the Fire Marshal's Office within 24 hours to fireprevention@anchorageak.gov.

I102.4.1.1 Corrective action. Systems reported as Status 1 shall be repaired immediately. Building and facilities with systems reported as Status 1 shall comply with IFC 901.7 through 901.7.6, and AFD Fire watch policy.

I102.4.1.2 Qualifying deficiencies. Systems with deficiencies listed in I102.4.1.2.1 through I102.4.1.2.8 shall be reported as Status 1.

I102.4.1.2.1 Fire sprinkler or water-based system. Impairment deficiencies refer to 2023 NFPA 25 Table A.3.3.8 for list and below requirements.

1. Non-working flow/pressure switches.
2. Damage to fire department connections.
3. No water to system.
4. Frozen or otherwise damaged system.
5. Local sprinkler alarm not functioning without monitoring.
6. Large quantities of corrosion scale or debris found when flowing of test connections, remote drains or water motor gong alarm lines. Clogged or plugged sprinkler heads, test ports or alarm lines.
7. Physically damaged piping, sprinkler heads or valves (such as from forklift strike).
8. Main drain test where residual pressure drops below 20 psi during flow of main drain.
9. Painted sprinkler heads reference the 2023 edition of NFPA 25, Table A3.3.8, Chapter 5 Sprinkler Systems Inspections.
10. Antifreeze systems where freeze protection is rated above 20° Fahrenheit.
11. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.2 Fire pump. Impairment deficiencies refer to 2023 NFPA 25 Table A.3.3.8 for list and below requirements.

1. Non-working fire pump.

2. Fire pump controls not working or malfunctioning.
3. Degradation of water supply below rating of pump, or any degradation causing cavitation of the pump.
4. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.3 Fire alarm system (detection and alarm):

1. Non-working fire alarm panel.
2. Malfunctioning fire alarm panel.
3. Audio and visual devices not working entire Notification Appliance Circuit (NAC) loop.
4. Detection not working entire detection loop.
5. Loss of programming.
6. More than three audio & visual devices not working in the building.
7. Detection devices not working - more than three devices in the building.
8. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.4 Kitchen hood fire system:

1. System cylinder is not charged or is leaking.
2. Appliance not properly covered due to rearrangement of appliances.
3. Plugged discharge nozzles.
4. Automatic detection not functional.
5. Fuel or electric power supply not shutting off.
6. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.5 Required clean agent or special hazard fire system:

1. System cylinder is not charged or is leaking.
2. Releasing panel not functional.
3. Where any of the following occur:
 - New holes and/or openings in walls and ceilings.
 - Wall or ceiling removed in system area.
 - Faulty door closers where required.
 - In any room or system area, physical changes to the building which could change clean agent concentration level, which adversely impact systems ability to perform as designed.
4. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.6 Gas detection system:

1. Nonworking control panel.
2. Malfunctioning control panel.
3. Detection not working.
4. Failure to report alarm.
5. Detection not provided due to modifications in the room with required protection.
6. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.7 Energy Systems/Emergency or legally required standby generator:

1. Nonworking generator.
2. Malfunctioning generator.
3. Failure to carry building load.
4. Failure of transfer switch.
5. Substantial deficiency not addressed but deemed by the servicing agent or fire code official, as impairment or out of service.

I102.4.1.2.8 Life safety system regulated by chapter 9:

1. Nonworking system.

2. Malfunctioning system.
3. Failure of detection or protection devices.
4. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as impairment or out of service.

I102.4.2 Status 2 - Critical Deficiency. Systems with a critical deficiency shall be reported as Status 2. The service company shall contact the Division of Fire Prevention at 267-4901 or emailed to fireprevention@anchorageak.gov within 14 days from the date of inspection if the deficiency cannot be repaired and system returned to service. Reports shall be sent to the Fire Marshal's Office in a manner approved by the fire code official.

I102.4.2.1 Corrective action. Systems reported as Status 2 shall be repaired within 14 days.

I102.4.2.2 Qualifying deficiencies. Systems with deficiencies listed in I102.4.2.2.1 through I102.4.2.2.9 shall be reported as Status 2.

I102.4.2.2.1 Fire sprinkler or water-based system. Critical deficiencies refer to 2023 NFPA 25 Table A.3.3.8 for list and below requirements.

1. Painted sprinkler heads reference the 2023 edition of NFPA 25, Table A3.3.8, Chapter 5 Sprinkler Systems Inspections.
2. Change of use in buildings which causes a change in the occupancy classification to a higher hazard occupancy.
3. Low water pressure - negative changes of 10% or more of static or residual pressures during main drain test from previous year test or from original flow information where available.
4. Any other major problem that will affect the performance - (bad trim valves, pressure switches, etc.).
5. No monitoring on required systems.
7. Water control valves that will not hold back water/allow water to leak by.
- 8.
9. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.2 Fire pump. Critical deficiencies refer to 2023 NFPA 25 Table A.3.3.8 for list and below requirements.

1. Low fuel.
2. Pump packing leaking beyond specifications.
3. Fire pump room below 40 degrees.
4. Fire pump not meeting its rated discharge pressure or GPM flow over a 10% difference.
5. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.3 Fire alarm system (detection and alarm).

1. Batteries overdue for replacement.
2. No monitoring on required system.
3. Audio and visual devices not working - up to three devices; over three devices Status 1.
4. Detection not working - up to three devices; over three devices Status 1.
5. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.4 Kitchen hood fire system.

1. Hood and ducts with heavy grease buildup.
2. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.5 Required clean agent or special hazard fire system.

1. Room not properly sealed.
2. Room size has changed.
3. Expired squibs.
4. HVAC shutdowns not properly working.
5. Any other major problem that will affect the performance. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.6 Non-required clean agent or special hazard fire system.

1. Room not properly sealed.
2. Room size has changed.
3. Expired squibs.
4. HVAC shutdowns not properly working.
5. Any other major problem that will affect the performance.
6. System cylinder is not charged or is leaking.
7. Releasing panel not functional.
8. Wall or ceiling removed in system area.
9. Faulty door closers where required.
10. In any room or system area, physical changes to the building which could change clean agent concentration level, which adversely impact system's ability to perform as designed.
11. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.7 Gas detection system:

1. Damaged detector.
2. Expired detectors.
3. Out of calibration range.
4. No current calibration.
5. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.8 Energy Systems/Emergency or legally required standby generator:

1. Failure to pass load bank test.
2. Failure to start in required time.
3. Malfunctioning automatic transfer switch.
4. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.2.2.9 Life safety system regulated by chapter 9:

1. Nonworking system.
2. Malfunctioning system.
3. Failure of detection or protection devices.

4. Substantial deficiency not addressed but deemed, by the servicing agent or fire code official, as critical.

I102.4.3 Status 3 - Noncritical Deficiency. Systems with a minor deficiency shall be reported as Status 3. Status 3 reports shall be provided to the Division of Fire Prevention in a manner approved by the fire code official within 30 days from the date of inspection. These deficiencies will not affect the performance of the system.

I102.4.3.1 Fire sprinkler or water-based system.

Noncritical deficiencies refer to 2023 NFPA 25 Table A.3.3.8 for list and below requirements.

1. Five-year obstruction investigation not performed or not verifiable.
2. Hydrostatic testing past due.

I102.4.3.2 Corrective action. Systems reported as Status 3 shall be repaired within 30 days.

I102.4.3.3 Qualifying deficiencies. Systems with minor deficiencies such as missing signs, data plates, leaking ball drip, improperly identified zones in panel programming, and similar items which will not affect the ability of the system to perform in any way shall be reported as Status 3. Includes any items not included in Status 1 or Status 2 and defined by NFPA as deficiencies.

I102.4.4 Status 4 - No Deficiencies. System with no deficiencies shall be reported as Status 4. Status 4 reports shall be provided to the Division of Fire Prevention in a manner approved by the fire code official within 30 days from the date of inspection.

23.45.N101.3 Application.

Add the following:

12. Site and/or floor plan showing all items required in items 1 through 11.
13. Detailed event narrative.

23.45.N107.3.2.4.

Change the word “and” to “or”

Section will read "N107.3.2.4 Vehicle fuel tank openings. Vehicle fuel tank openings shall be locked or sealed to prevent the escape of vapors".

Section 9. Anchorage Municipal Code Chapter 23.60 is hereby repealed in its

entirety and replaced with the following:

Chapter 23.60 LOCAL AMENDMENTS TO THE INTERNATIONAL ENERGY CONSERVATIVE CODE

23.60.100 Local Amendments to the International Energy Conservation Code.

The amendments to the International Energy Conservation Code (IECC) 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.

23.60.C102.2—23.60.C110 Delete sections.

Delete sections C102.2 through C110. Refer to the Anchorage Administrative Code.

23.60.C303.1.4 Insulation product rating.

Add the following exception:

Exception: A mean testing temperature of 40°F is acceptable for demonstrating compliance with this code.

23.60.C401.3 Thermal envelope certificate.

Add the following to the end of the section:

Approved parties include energy rater or builder.

23.60. Table C402.1.2 Opaque Building Thermal Envelope Assembly Maximum Requirements, U-factor Method.

Replace TABLE C402.1.2 with the following:

TABLE C402.1.2 OPAQUE THERMAL ENVELOPE ASSEMBLY REQUIREMENTS, U-FACTOR METHOD CLIMATE ZONE 7, All other and Group R		
Component	Approvable Maximum Factors	Enhanced Maximum Factors
Roofs		
Insulation entirely above roof deck	U-0.032	U-0.028
Metal buildings	U-0.035	U-0.029
Attic and other	U-0.021	U-0.017
Walls, above grade		
Mass ^c	U-0.071	N/A
Metal Building	U-0.052	U-0.044
Metal Framed	U-0.064	U-0.049
Wood framed and other ^c	U-0.064	U-0.051
Insulated Metal Panels	U-0.050	N/A

Walls, below grade		
Below-grade wall ^a	C-0.119	C-0.063
Floors		
Mass ^b	U-0.057	U-0.042
Joist/Framing	U-0.033	U-0.027
Slab-on-grade floors		
Unheated slabs	F-0.52	F-0.51
Heated slabs ^a	F-0.62	F-0.602
Opaque doors		
Nonswinging door	U-0.31	N/A
Swinging door ^d	U-0.37	N/A
Garage door with less than 14% glazing ^e	U-0.31	N/A

a. Where heated slabs are below grade, below-grade walls shall comply with the U-factor requirements of above-grade mass walls.

b. "Mass floors" shall be in accordance with Section C402.1.3.4.

c. "Mass walls" shall be in accordance with Section C402.1.3.4.

d. Swinging door U-factors shall be determined in accordance with NFRC-100.

e. Garage doors having a single row of fenestration shall have an assembly U-factor less than or equal to 0.36, provided that the fenestration area is not less than 14 percent and not more than 25 percent of the total door area.

23.60.C402.1.2.1 Methods of determining U-, C-, and F-factors.

Replace reference to "Table C402.1.4" with "Table C402.1.2."

23.60. Table C402.1.3 Opaque Building Thermal Envelope Insulation Component Minimum Requirements, R-value Method.

Replace TABLE C402.1.3 with the following:

TABLE C402.1.3 OPAQUE BUILDING THERMAL ENVELOPE INSULATION COMPONENT MINIMUM REQUIREMENTS, R-VALUE METHOD ^a CLIMATE ZONE 7, All other and Group R		
Component	R-Value (Minimum)	R-Value (Enhanced)
Roofs		
Insulation entirely above deck	30ci	35ci
Metal Buildings ^b	19+11LS	30+11LS
Attic and Other	49	60
Walls, above grade		
Mass ^e	15.2ci	N/A

Metal Building	13+13ci	13+17ci
Metal Framed	13+7.5ci or 20+6.3ci	13+12.5ci or 20+11ci
Wood framed and other	13+3.8ci or 20	13+7.5ci or 20+3.8ci
Insulated Metal Panels	20	N/A
Walls, below grade		
Below-grade walls ^c	7.5ci	15ci
Floors		
Mass ^d	14.6ci	20.9ci
Joist/Framing ^g	30 (wood) 38 (steel)	38 (wood) 38+6ci (steel)
Slab-on-grade floors		
Unheated slabs	15, 24 inches	20, 24 inches
Heated slabs ^f	15, 24 inches & 5 full slab	20, 48 inches & 5 full slab

ci = continuous insulation, LS = liner system

a. Assembly descriptions can be found in ANSI/ASHRAE/IES 90.1 Appendix A.

b. Where using R-value compliance method, a thermal spacer block shall be provided (minimum R-5), otherwise use the U-factor compliance method.

c. Where heated slabs are below grade, below-grade walls shall comply with the R-value requirements for above-grade mass walls.

d. "Mass floors" shall be in accordance with Section C402.1.3.4.

e. "Mass walls" shall be in accordance with Section C402.1.3.4.

f. The first value is for perimeter insulation and the second value is for full, under-slab insulation. Perimeter insulation and full-slab insulation components shall be installed in accordance with Section C402.2.4.

g. For joist/framing floor cavities 12 inches or less in depth, the entire cavity shall be filled with insulation.

23.60. Table C402.5 Building Thermal Envelope fenestration Maximum U-Factor and SHGC Requirements.

Replace TABLE C402.5 with the following:

TABLE C402.4 BUILDING THERMAL ENVELOPE FENESTRATION MAXIMUM U-FACTOR AND SHGC REQUIREMENTS CLIMATE ZONE 7		
Item	Approvable Maximum	Enhanced Maximum
Vertical Fenestration		
Fixed fenestration - includes curtain wall, storefront, picture windows, and other fixed windows	U-0.34	U-0.28

1
2
3
4

Operable fenestration - includes openable fenestration products other than "entrance doors"	U-0.45	U-0.36
Entrance doors	U-0.63	N/A
SHGC - PF < 0.2	0.36	0.4
SHGC - 0.2 ≤ PF < 0.5	0.43	0.48
SHGC - PF ≥ 0.5	0.58	0.64
Skylights		
U-factor	U-0.5	U-0.44
SHGC	NR	N/A

23.60.C402.2.1 Roof-ceiling construction.

Add the following sentence:

When eave vents are installed, baffling of the vent openings shall be provided to deflect the incoming air above the surface of the insulation.

23.60.C403.4.1.5 Heated or cooled vestibules.

Amend section C403.4.1.4 to read as follows:

Vestibule heating systems shall be controlled by a thermostat located in the vestibule.

23.60.C403.4.2.3 Optimum start and stop.

Add to the end of the exception after "sleeping units" the following:

"...or where systems are not controlled by Direct Digital Control..."

23.60.C403.4.4 Part load controls.

Amend section C403.4.4 by deleting "and cooling demand" from Item No. 1, and add exception item 5 to read as follows:

5. Hydronic heating systems serving domestic hot water generation equipment or other equipment that requires a consistent supply temperature or flow may override temperature setback and/or flow controls in this section.

23.60.C403.7.4.2 Spaces other than nontransient dwelling units (Energy recovery systems).

Amend the exception by revising condition Number 8 to read as follows:

8. For each system where the largest source of air exiting the building at a single location at the building exterior is less than 75 percent of the design outdoor airflow rate.

23.60.C403.7.7 Shutoff dampers.

Add additional exception to end of section as follows:

Exception: Dampers, nonmotorized or motorized, shall not be required for exhaust systems where grease, lint, and similar particulates may accumulate on the damper and create a fire hazard.

23.60.C403.13.3 Piping insulation.

Add exception item 8 as follows:

8. Piping within baseboard radiation assemblies serving the zone requiring conditioning and piping that is intended to serve as a terminal heating device.

23.60.C404.5 Heated water supply piping.

Delete section C404.5.

23.60.C404.6.1 Circulation systems.

Add the following exception:

Exception: Circulation pumps may be controlled by time clock.

23.60.C405.1 General

Amend the second paragraph to read as follows:

Compliance with section C405 may be achieved by one of the following:

1. Compliance with the interior lighting power requirements specified in Section C405.3. Compliance with Section C405.2 and Sections C405.4 through C405.16 is not required.
2. Compliance with lighting controls specified in Section C405.2 (as amended) and compliance with the interior lighting power requirements specified in Section C405.3 where the total connected interior lighting power is no greater than 125% of the interior lighting power allowance. Compliance with Sections C405.4 through C405.16 is not required.

23.60.C405.2.2.2 Light-reduction controls.

Amend section C405.2.2.2 by revising the exception as follows:

Exception: Light reduction controls are not required in:

- a) Daylight zones with daylight responsive controls complying with Section C405.2.3.
- b) Spaces that have only one luminaire with a rated power of less than 100 watts.
- c) Spaces that use less than 0.6 watts per square foot.
- d) Corridors, lobbies, restrooms and similar common spaces.
- e) Equipment rooms, storerooms and similar normally unoccupied spaces.
- f) Areas where HID lighting is used as the primary light source.

23.60.C405.2.4 Daylight-responsive controls.

Unless using daylight-responsive controls to comply with other provisions in this code, compliance with this section is optional.

23.60.C405.2.5 Specific application controls.

Compliance with this section is optional.

23.60.C405.2.7 Exterior lighting controls.

Revise the first sentence to read as follows:

Exterior lighting systems shall be provided with controls that comply with Section C405.2.7.1 or Section C405.2.7.4.

Delete the second sentence.

23.60.C405.2.9 Interior parking area lighting controls.

In the second sentence, change the word “shall” to “may.”

23.60.C405.2.10 Sleeping unit and dwelling unit lighting and switched receptacle controls.

Compliance with this section is optional.

23.60.C405.15 Renewable energy systems.

Delete section in its entirety.

23.60.C406 Additional Efficiency, Renewable and Load Management Requirements.

Delete section C406.

23.60.C408.2 Mechanical systems and service water-heating systems commissioning and completion requirements.

In exception item 2, remove the words “within dwelling units or sleeping units.”

In exception item 2.2, replace “in the dwelling” with “in a dwelling unit.”

23.60.C503.1 General (Alterations).

Rewrite the exception as follows:

Exception: The following alterations shall not be required to comply with the requirements for new construction provided that the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation.
3. Construction where the existing roof, wall or floor cavity is not exposed.

4. Roof recover.
5. Roof replacement where roof assembly insulation is integral to or located below the structural roof deck.
6. Roof replacement where roof assembly insulation is above the roof deck and the insulation cannot be increased without modifying the structure to support full snow load.
7. Air barriers shall not be required for roof recover and roof replacement where the alterations or renovations to the building do not include alterations, renovations or repairs to the remainder of the building thermal envelope.
8. Surface-applied window film installed on existing single-pane fenestration assemblies to reduce solar heat gain provided that the code does not require the glazing or fenestration assembly to be replaced.
9. An existing building undergoing alterations that complies with Section C407.

23.60.C503.3.6 Replacement or added roof-mounted mechanical equipment (Alterations).

Add an exception as follows:

Exception: Curb height does not need to be increased where utilizing the existing curb and a curb adaptor is not required.

23.60.C505 Change of use or occupancy.

Throughout this section, replace “results in the same or increased energy use intensity rank” with “results in increased energy use intensity rank.”

23.60.C505.2.1 Building thermal envelope (Change of use or occupancy).

Replace the exception with the following:

Exception: The new occupancy is exempt from Section C402.5.1 if there is not a net increase in fenestration area.

23.60.R101—23.60.R505 Residential Provisions.

Energy conservation provisions for residential buildings as defined in Chapter 2 of this code shall comply with IRC Chapter 11, as amended under Chapter 23.85.

Section 10. Anchorage Municipal Code Chapter 23.65 is hereby repealed in its entirety and replaced with the following:

Chapter 23.65 LOCAL AMENDMENTS TO THE INTERNATIONAL

EXISTING BUILDING CODE

23.65.100 Local Amendments to the International Existing Building Code.

The amendments to the International Existing Building Code (IEBC) 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.

23.65.103—23.65.117 Delete sections.

Delete IEBC sections 103 through 117. Refer to the Anchorage Administrative Code.

23.65.302.6 Abandoned equipment

Add the following section:

302.6 Abandoned equipment. Seismically unbraced equipment no longer in use and suspended over occupied space shall be removed.

23.65.302.7 Existing acoustical tile and lay-in panel suspended ceilings.

Add the following section:

302.7 Existing acoustical tile and lay-in panel suspended ceilings.

Suspended ceiling systems exceeding 144 square feet in area and undergoing repair, modification, raising or lowering of the grid, or where more than 50 percent of the tiles are replaced shall be evaluated for compliance with the seismic provisions of ASCE 7. Noncompliant ceiling systems shall be seismically restrained in accordance with ASCE 7. The suspended ceiling system area is the area of ceiling bounded by walls, partitions, soffits, or seismic separation joints.

Exception: Where the grid is not being replaced, two-inch wide perimeter support closure angle and seismic separation joints are not required.

23.65.304.4 Additional permit requirements for reroofing.

Amend section 304 by adding the following section:

304.4 Additional permit requirements for reroofing.

In addition to the permit submittal requirements in Chapter 23.10, the following information is required for reroof permits:

1. In existing non-snow-drift areas, if the R value of the existing assembly is less than R-30 and the new system will increase the R value by more than 30 percent, an engineer's report is required to verify that the existing framing is sufficient for a 40-psf snow load (allowable).

Exception: Existing cold ventilated roofs.

2. In existing snow-drift areas, if the assembly increases the R value 30 percent or more, an engineer's report is required verifying that the existing framing is sufficient for 40-psf snow load plus drift (allowable).

Exception: Existing cold ventilated roofs.

3. Where unlisted mechanical fasteners are used, capacities based on testing shall use the following minimum factors of safety:
Fasteners in wood (4), Fasteners in metal deck (3).

23.65.502.3 Existing structural elements carrying gravity load.

Replace "5 percent" in the first sentence with "10 percent".

23.65.502.4 Existing structural elements carrying lateral load.

Add the following exception 3:

3. Additions to one- and two-family detached structures are not required to be structurally independent from the existing structure where all of the following conditions are met:
 1. The occupancy of the addition is the same as the existing, or is a Group U occupancy;
 2. The existing structure is not needed to support lateral loads from the addition other than at the common wall(s);
 3. The common wall(s) can support the combined loads from the existing and new structures; and
 4. The addition does not reduce the capacity of any existing lateral element.

23.65.503.3 Existing structural elements carrying gravity load.

Replace "5 percent" in the first sentence with "10 percent".

23.65.706.2 Addition or replacement of roofing or replacement of equipment.

Replace "5 percent" with "10 percent".

Delete exception No. 2.

23.65.803.2 Automatic sprinkler systems.

Amend section 803.2.2 by deleting the reference to Group E occupancies.

Add the following subsection:

23.65.803.2.2.2 Group E Occupancy: When required by the International Fire Code, an automatic sprinkler system shall be installed throughout all buildings containing a group E occupancy.

23.65.804.6.4 Panic hardware.

Amend section 804.6.4 by replacing "greater than 100" with "of 50 or more".

23.65.805.2 Existing structural elements carrying gravity load.

Replace "5 percent" with "10 percent".

Replace the second sentence with the following:

Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased by more than 10 percent as part of the alteration shall be shown to have the capacity to resist the applicable design dead, live and snow loads including snow drift effects required by the International Building Code for new structures.

Delete exception No. 2.

23.65.1006.1 Live loads.

Replace "5 percent" in the exception with "10 percent".

23.65.1011.2.1 Automatic sprinkler system.

Delete from the last sentence of the section, "nonrated permanent partition and horizontal assemblies."

23.65.1011.5.1 Means of egress for change to a higher-hazard category.

Amend Section 1011.5.1 by deleting Exception 6.

23.65.1011.5.6 Existing emergency escape and rescue openings.

Amend Section 1011.5.6 by deleting it in its entirety.

23.65.1103.1 Additional gravity loads.

Replace "5 percent" with "10 percent".

23.65.1103.2 Lateral force-resisting system.

Add exception #3 to read as follows:

3. Additions to one- and two-family detached structures are not required to be structurally independent from the existing structure where all of the following conditions are met:
 1. The occupancy of the addition is the same as the existing occupancy, or is a Group U occupancy;
 2. The existing structure is not needed to support lateral loads from the addition other than at the common wall(s);
 3. The common wall(s) can support the combined loads from the existing and new structures; and
 4. The addition does not reduce the capacity of any existing lateral element.

23.65.1402.5 Snow loads.

Replace "5 percent" in the exception with "10 percent".

Section 11. Anchorage Municipal Code Chapter 23.75 is hereby repealed in its entirety and replaced with the following:

**Chapter 23.75 LOCAL AMENDMENTS TO THE AMERICAN
SOCIETY OF MECHANICAL ENGINEERS (ASME) A17.1 SAFETY CODE
FOR ELEVATORS AND ESCALATORS**

**23.75.0 Local Amendments to the American Society of Mechanical
Engineers A17.1 Standard.**

The amendments to the American Society of Mechanical Engineers A17.1 Standard - Safety Code for Elevators and Escalators (ASME A17.1) are listed hereafter by section. The structure of amendments is as explained in AMC 23.05.015.

23.75.1.1.4 Effective Date.

Amend Section 1.1.4 to read as follows:

The effective date for ASME A17.1-will be that which is decided upon by the Municipality of Anchorage (MOA) Assembly.

23.75.1.3 Definitions.

In 1.3-Definitions: Amend the definition of "elevator personnel" to read as follows:

Elevator personnel: persons who have been trained in the construction, maintenance, repair, inspection, or testing of the particular type of device they are constructing, maintaining, repairing, inspecting, or testing.

23.75.2.2.2 Design and Construction of Pits.

Replace section 2.2.2.3 with the following:

For pits subject to the periodic accumulation of ground water, a permanent drain or sump pump shall be installed. For pits not subject to the periodic accumulation of ground water, the permanent installation of a drain or sump pump is not required, unless required by Section 2.2.2.5.

Replace section 2.2.2.5 with the following:

Elevators serving 4 or more stories above or 4 or more stories below the level of fire department vehicle access and elevators serving Group I-2 occupancies shall be provided with a gravity drain or sump pump. The level of fire department vehicle access shall be considered the first story. The drain or sump pump shall have the capacity to remove a minimum of 50 gallons per minute per common elevator hoistway or pit. This provision does not apply to existing elevator hoistways.

Add the following sections:

2.2.2.7 Sump pumps serving elevators required to be powered by a standby or emergency generator shall also be powered by the standby or emergency generator.

2.2.2.8 Discharge shall go into the building sanitary drainage system or to an approved location on the exterior of the building.

2.2.2.9 Discharging into the building sanitary drainage system shall be through an air gap or air break into an approved indirect waste receptor. The indirect waste receptor shall be of such shape and capacity to control splashing or flooding and shall be located where readily accessible for inspection. The sanitary drainage system must be sized in accordance with the plumbing code to accommodate the rate of flow.

2.2.2.10 The discharge point shall be permanently labeled "ELEVATOR PIT DISCHARGE" in letters a minimum of ½ inch in height. Discharge resulting from periodic ground water accumulation shall not flow over a walking surface and shall not create a nuisance or hazard. Discharge resulting from fire suppression shall not create a hazard.

23.75.2.7.6.2 Location of Machinery Spaces and Control Spaces.

Amend section to read as follows:

2.7.6.2 Location of machinery spaces and control spaces. Machinery spaces may be located inside or outside the hoistway. Control spaces are not permitted inside the hoistway unless it can be accessed for service from outside the hoistway. Service includes maintenance, repair, and replacement activities for all equipment and components within the control space.

Exception: Control spaces may be located and accessed within a walk-in pit.

23.75.2.27.1.1.3 Emergency Communication.

Amend subsection (c) to read as follows:

(c) On the same panel as the phone push button, a Message or visual indication shall be displayed that is activated by authorized personnel to acknowledge that communications are established. The message or visual indication shall be permitted to be extinguished where necessary to display a new message or visual signal or when communications are terminated." Delete subsections (d), (e), and (k).

23.75.2.27.1.1.4 Emergency Communications.

Amend the first paragraph of section 2.27.1.1.4 to read as follows:

Where the elevator rise is 18 m (60 ft) or more, a two-way voice communication means shall be located in the fire command center. If there is no fire command center, then it shall be located adjacent to the main fire alarm panel, adjacent to the main elevator entrance(s) at the primary re-call

landing of the building or in a location approved by the AHJ. The two-way voice communication means shall comply with the following requirements.

23.75.5.3.1.6.6 Access Doors and Openings.

Add item (4) as follows:

(4) Permitted to be secured by means of tamper-resistant fastening hardware provided that they are located at least 79" above finished floor and not larger than 600 mm (24 inches) in width and height.

23.75.5.3.1.19.2.3 Monitoring the Hoistway Door Locking Device Contacts.

Replace section as follows:

The car shall not be permitted to restart until the door locking device contacts have been returned to the normal operating position.

23.75.6.1.3.15 Water Accumulation.

Amend the last sentence of section 6.1.3.15 to read as follows:

Drains and sump pumps, where provided, shall comply with the applicable plumbing code and shall be provided with a positive means to prevent water, gases, and odors from entering the pit.

23.75.6.2.3.18 Water Accumulation.

Amend the last sentence of section 6.2.3.18 to read as follows:

Drains and sump pumps, where provided, shall comply with the applicable plumbing code and shall be provided with a positive means to prevent water, gases, and odors from entering the pit.

23.75.8.1.2 Group 1: Restricted.

Amend section 8.1.2, by adding subparagraphs (e), (o) and (p) as follows:

- (e) Requirement 2.7.6.3.2(b), motor controller cabinet door(s) or panel(s), shall apply to new installations only.
- (o) Requirement 3.19.4.4, access to a manual lowering valve, shall apply to new installations only.
- (p) Requirement 3.19.4.5, access to pressure gauge fittings, shall apply to new installations only.

23.75.8.4.10.1.1 (j) Earthquake Equipment.

Delete subsection 8.4.10.1.1 (j).

23.75.8.6.1.1.2 Maintenance, Repair and Replacement.

Amend section 8.6.1.1.2 by adding subparagraph (d) to read as follows:

- (d) The manufacturer's design and intended function of components and systems.

23.75.8.6.1.7.2 Periodic Test Record.

Amend section 8.6.1.7.2 to read as follows:

8.6.1.7.2 - Periodic Test Record. A periodic test record for all periodic tests containing the applicable Code requirement(s) and date(s) performed, and the name of the person and elevator contractor performing the tests, shall be created and shall be safely and securely stored with the On-Site Maintenance Records in the machine room/space, Control room/space for each unit or in a location on the premises approved by the Authority Having Jurisdiction. The record of periodic tests shall be recorded on the approved applicable Municipality of Anchorage test form.

23.75.8.6.4 Maintenance and Testing of Electric Elevators .

Delete Section 8.6.4.19.7 Standby or Emergency Power Operation.

Add Section 8.6.4.20.12 to read as follows:

8.6.4.20.12 Standby or Emergency Power Operation. Operation of elevators equipped with Standby or Emergency power shall be tested to determine conformance with the applicable requirements (Item 1.17.2.1). Tests shall be performed with no load in the car.

Add Subsection 8.6.4.24 as follows:

8.6.4.24 Systems to Monitor and Prevent Automatic Operation of Passenger and Freight Elevators with Faulty Door Contact Circuits. All automatic passenger and freight elevators shall comply with 2.26.5 by the date of January 1st 6 years from adoption of code.

23.75.8.6.5 Maintenance and Testing of Hydraulic Elevators.

Amend subsection 8.6.5.14.3 by adding items (j), (k) and (l) as follows:

- (j) Emergency Communication (8.6.4.19.15)
- (k) Means to Restrict Hoistway or Car Door Opening (8.6.4.19.16)
- (l) Inspect and record measurement of Top Runby of car with elevator on its stop ring

Delete from subsection 8.6.5.14.3 item (f).

Add subsection 8.6.5.16.7 to read as follows:

8.6.5.16.7 Standby or Emergency Power Operation. Operation of elevators equipped with Standby or Emergency power and that operate within a group and equipped with a generator selector switch shall be tested to determine conformance with the applicable requirements (Item 1.17.2.2). Tests shall be performed with no load in the car. Elevators equipped with Standby or Emergency power that are not part of a group shall have its visual signal at the primary landing tested by simulation operation of generator and verified as operational if the elevator is so equipped with this visual signal.

Add subsection 8.6.5.19 as follows:

8.6.5.19 Systems to Monitor and Prevent Automatic Operation of Passenger and Freight Elevators with Faulty Door Contact Circuits. All automatic passenger and freight elevators shall comply with 2.26.5 by the date of January 1st 6 years from adoption of code.

23.75.8.6.11.1 Firefighters' Emergency Operation.

Amend section 8.6.11.1 to read as follows:

8.6.11.1 Firefighter's Emergency Operation. Firefighter's Emergency Operation (Phase 1 & 2) shall be subjected to periodic testing not less than once for every 3-month period of time. Testing may be performed by authorized personnel or elevator personnel with documentation and results of the tests recorded on a test form approved by the AHJ. The test form shall be made available to elevator personnel and the Authority Having Jurisdiction and shall be stored with the maintenance records for that elevator or in a location approved by the AHJ.

23.75.8.7.1.1 Applicability of Alteration Requirements.

Amend section 8.7.1.1 to read as follows:

8.7.1.1 Applicability of Alteration Requirements. When any Alteration is performed, regardless of other requirements of section 8.7, the installation, as a minimum, shall conform to the applicable Code requirements identified in subparagraphs (a) and (b) of this section. When a modernization is performed, regardless of other requirements of section 8.7, the installation, as a minimum, shall conform to the applicable code requirements identified in subparagraphs (a) through (c) of this section. For the purposes of administering the requirements of section 8.7, a "Modernization" shall be defined as controller replacement, or a change in type of motion or operation control.

- (a) The code at the time of installation
- (b) The code requirements for the alteration at the time of any alteration
- (c) ASME A17.3

23.75.8.7.1 General Requirements.

Add section to read as follows:

8.7.1.11.When alterations are performed on an existing elevator that require compliance with Section 2.12, an Unlocking zone from the landing floor level not greater than 18 inches shall be permitted in lieu of a 7-inch unlocking zone, when the original effective code of the elevator permitted an 18 inch unlocking zone and the elevator was previously equipped with a means of restricting opening of the car door prior to the Alteration.

23.75.8.7.2.14.5.2 Addition of Car Top Railing.

Amend section to read as follows:

8.7.2.14.5.2. Where conformance with 2.14.1.7 is not possible due to existing overhead conditions the height of the top rail shall be permitted to be reduced to 39 inches or a stowable design, e.g., foldable or collapsible,

23.75.8.7.2.29 Electric Seismic Requirements.

Add section 8.7.2.29 to read as follows:

8.7.2.29 Electric Seismic Requirements. When the alteration includes replacing the controller or drive machine, the installation shall conform to section 8.4.10. For other seismic upgrades made to the equipment, the equipment and work performed shall conform to the requirements of section 8.4 where applicable.

23.75.8.7.3.32 Hydraulic Seismic Requirements.

Add section 8.7.3.32 to read as follows:

8.7.3.32 Hydraulic Seismic Requirements. When the alteration includes replacing the controller, hydraulic machine or hydraulic jack, the installation shall conform to sections 8.4.11.11, 8.4.11.12 and section 8.4.11.13. For other seismic upgrades made to the equipment, the equipment and work performed shall conform to the requirements of section 8.4 where applicable.

23.75.8.10.1.1.4 Acceptance Test Tags.

Delete section 8.10.1.1.4

23.75.8.10.1.1.5 Acceptance Test Records.

Amend section 8.10.1.1.5 by adding the following sentence to the end of the section:

The test record shall be installed to be readily visible and shall be permanently attached on or adjacent to the controller of each unit.

23.75.8.11.1.1.2 Periodic Tests.

Amend section 8.11.1.1.2 to read as follows:

The owner or the owner's authorized agent shall have all of the periodic tests required by 8.6.4, 8.6.5, 8.6.6, 8.6.7 & 8.6.8, performed by elevator personnel as defined in A17.1-2016. All periodic tests required by 8.6.4, 8.6.5, 8.6.6 & 8.6.7 shall be permitted to be witnessed by the elevator personnel. Periodic test results shall be reviewed for compliance by a Municipality of Anchorage (MOA) Elevator Inspector during their periodic inspections required by 8.11.2, 8.11.3 and 8.11.5. The elevator personnel shall record the test results on the approved MOA A17.1-2016 periodic test form. The MOA A17.1-2016 periodic test form shall be placed in the

elevator machine room/space or control room/space, or other location approved by the Authority Having Jurisdiction for review by the MOA Elevator Inspectors during their periodic inspections required by 8.11.2, 8.11.3 and 8.11.5. For Periodic test requirements listed in 8.6.8 (Escalators and Moving Walks), The MOA Elevator Inspector shall be the witness to the tests, at the time that the periodic inspection is being performed, except that the Step/Skirt Performance Index test and the Comb-step / Comb-pallet Impact test may be permitted to be performed. witnessed and documented by elevator personnel at a time other than when the periodic inspection occurs.

At major modernization acceptance inspections, all Category-1, 3 & 5 tests applicable to a conveyance shall be witnessed by a MOA Elevator Inspector.

23.75.8.11.1.2 Applicability of Inspection Requirements.

Amend section 8.11.1.2 by adding subparagraph (d) as follows:

- (d) The manufacturer's design and intended function of components and systems.

23.75.8.11.1.3 Periodic Inspection and Test Frequency.

Amend section 8.11.1.3 to read as follows:

8.11.1.3 Periodic Inspection and Test Frequency. The inspection and test intervals for all equipment covered by ASME A17.1 shall be as noted in Appendix N, Table N-1, except as noted in subparagraphs (a) through (d):

- (a) Periodic inspections for all equipment except escalators, moving walks and all private residence conveyances shall be performed at intervals of 24 months.
- (b) Periodic inspections for escalators and moving walks shall be performed at intervals of 12 months.
- (c) All private residence conveyances shall be exempt from periodic inspection requirements.
- (d) Periodic Inspections may also be performed at any time in situations where alterations to the equipment has occurred, deficiencies from previous reports remain unresolved, when an accident involving the equipment has been reported to the department, when a complaint regarding the safety of the equipment has been reported to the department and in all instances when the department has reason to believe that the equipment may be operating in an unsafe condition.

Section 12. Anchorage Municipal Code Chapter 23.76 is hereby repealed in its entirety and replaced with the following:

**Chapter 23.76 LOCAL AMENDMENTS TO THE AMERICAN
SOCIETY OF MECHANICAL ENGINEERS (ASME) A18.1 SAFETY
STANDARDS FOR PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS**

**23.76.0 Local Amendments to the American Society of Mechanical
Engineers A18.1 Standard.**

The amendments to the American Society of Mechanical Engineers A18.1 Standard - Safety Standard for Platform Lifts and Stairway Chairlifts (ASME A18.1) are listed hereafter by section. The structure of amendments is as explained in AMC 23.05.015.

23.76.1.1.3 Application.

Amend the definition of "Application" to read as follows:

"This Standard applies to new installations only, except sections 10 and 11, which apply to new and existing installations."

23.76.1.3 Definitions—Machine, driving.

Replace the definition of "Roped-Hydraulic Driving Machine" as follows:

Roped-hydraulic driving machine: a hydraulic driving machine in which the plunger or piston is connected to the platform with wire ropes or roller chains or indirectly coupled to the platform by means of wire ropes and sheaves or roller chains and sprockets. It includes the cylinder, the plunger or piston, and multiplying sheaves or sprockets, if any, and their guides.

23.76.1.3 Definitions—Installation placed out of service.

Replace the definition of "Installation, placed out of service" to read as follows:

Installation, placed out of service: An installation whose power feed lines have been disconnected from the machine disconnect switch, whose suspension means, driving belts, etc. have been removed from the premises, whose car and counterweight rests at the bottom of the runway, whose pressure piping has been disassembled and a section removed from the premises, and whose hoistway doors are permanently barricaded or sealed in the closed position on the runway side, except for the bottom landing door/gate which can be sealed or barricaded on the outside of the runway with a permanent and tamper proof means.

23.76.2.1.1.7 Runway Enclosure Provided.

Amend section 2.1.1.7 by adding the following sentence to the end of the section:

"Running clearance between platform enclosure walls and the runway enclosure walls, vertical face of the machine housing, or other rigid surfaces

shall not exceed 75mm (3 in.) when the open space is of a width 300mm (12 in.) or greater."

23.76.2.3 Driving Means and Sheaves.

Amend section 2.3 by adding the following:

"(l) chained-hydraulic"

23.76.2.7.1 Travel Distance.

Replace subsection 2.7.1 with the following:

2.7.1 Travel of the lifts conforming to 2.1.1 and 2.1.2 shall not exceed 4250 mm (168 inches) for all installations in buildings other than Residential Group R. In building with Residential Group R occupancies, the total travel of the lift shall not exceed the rise in which it is designated by the lift manufacturer and to which the lift has been designed and tested.

23.76.5.3 Driving Means and Sheaves.

Amend section 5.3 by adding the following:

"(l) chained-hydraulic"

23.76.10.1 General Requirements.

Amend section 10.1.1 to read as follows:

10.1.1 Periodic Inspections. For devices identified in Parts 2, 3 and 4 of this standard, periodic inspections shall be performed at intervals of 24 months by an inspector approved by the Authority Having Jurisdiction.

Amend section 10.1.2 to read as follows:

The owner or the owner's authorized agent shall have all of the periodic tests required by 10.2 and 10.3 performed by Lift personnel, as defined in 1.3 of ASME A18.1. All periodic tests required by 10.2 and 10.3 shall be permitted to be witnessed by the Lift personnel. The Lift personnel shall record the test results on the approved MOA A18.1 periodic test form. The MOA A18.1 periodic test form shall be placed on the lower exterior of the lift tower (if the lift is a vertical platform lift), or adjacent to the top or bottom ends of the lift (if the lift is an inclined platform lift or stairway chairlift) for review by the MOA Elevator Inspector during their routine inspections required by 10.1.1.

23.76.10.2 Routine Inspections and Tests.

Amend the title and language of section 10.2.1 to read as follows:

"Inspection and Test Periods. The routine inspections and tests of sections 2 through 4 lifts (lifts installed in locations other than in or at a private residence) shall be made at intervals not longer than 24 months."

23.76.10.3.1.7 Slack-Rope Device on Roped-Hydraulic Machines.

Amend the title and language of section 10.3.1.7 to read as follows:
"Slack-Rope or Slack-Chain Device on Roped-Hydraulic and Chained-Hydraulic Machines. Slack-rope or slack-chain devices for roped-hydraulic or chained-hydraulic lifts will be tested for conformance by lowering the platform or blocking and creating slack rope or chain causing the device to operate. The slack rope or chain can also be obtained by operation of the safety during the annual safety test."

23.76.10.3.3 Ropes.

Amend the first sentence in section 10.3.3.4 to read:
"Ropes or chains used on roped-hydraulic or chained-hydraulic lifts shall be inspected."

**23.76.11.1.2(c) Written Maintenance
Program (WMP/MCP).**

Amend section 11.1.2(c) to read:
"(c) a procedure for checking the operation of the lift to be conducted at least once per quarter by authorized personnel."

23.76.11.3.1 On-Site Documentation.

Amend section 11.3.1 by adding subsection (e) as follows:
"(e) for lifts that have a runway enclosure, the required on-site documentation logs shall be kept outside the tower but within the lower end of runway enclosure, so that they are available to lift and inspection personnel, but not to the general public (one-year and five-year test forms shall still be in their own plastic sleeve on the lower exterior of the lift tower, per local amendment to section 10.1.2, and the test forms shall not be covered up by the written maintenance program logs). For lifts that have no runway enclosure, the required on-site documentation shall be kept in a secure on-site location chosen by the building owner or their representative, so that the written documents are available to lift and inspection personnel, but not where they are available to the general public. For those documents kept in a secure-on-site location, instructions to locate the written documents shall be placed on the lower exterior of the lift tower adjacent to the test forms, if the lift is a vertical platform lift, or adjacent to the top or bottom ends of the lift adjacent to the test forms, if the lift is an inclined platform lift or stairway chairlift."

Section 13. Anchorage Municipal Code Chapter 23.85 is hereby repealed in its entirety and replaced with the following:

**Chapter 23.85 LOCAL AMENDMENTS TO THE INTERNATIONAL
RESIDENTIAL CODE**

23.85.R100 Local amendments to the International Residential Code.

The amendments to the International Residential Code (IRC) 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.

23.85.R101.2 Scope.

Replace in the first line of the exception “with an automatic sprinkler system complying with Section P2904” with the following: with a residential fire sprinkler system approved by the fire code official.

Delete item 2.

23.85.R103—23.85.R114 Administration and Enforcement.

Delete Sections R103 through R114. See the Anchorage Administrative Code, Chapter 23.10 for Administrative Provisions, Fees, and Special Inspections.

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

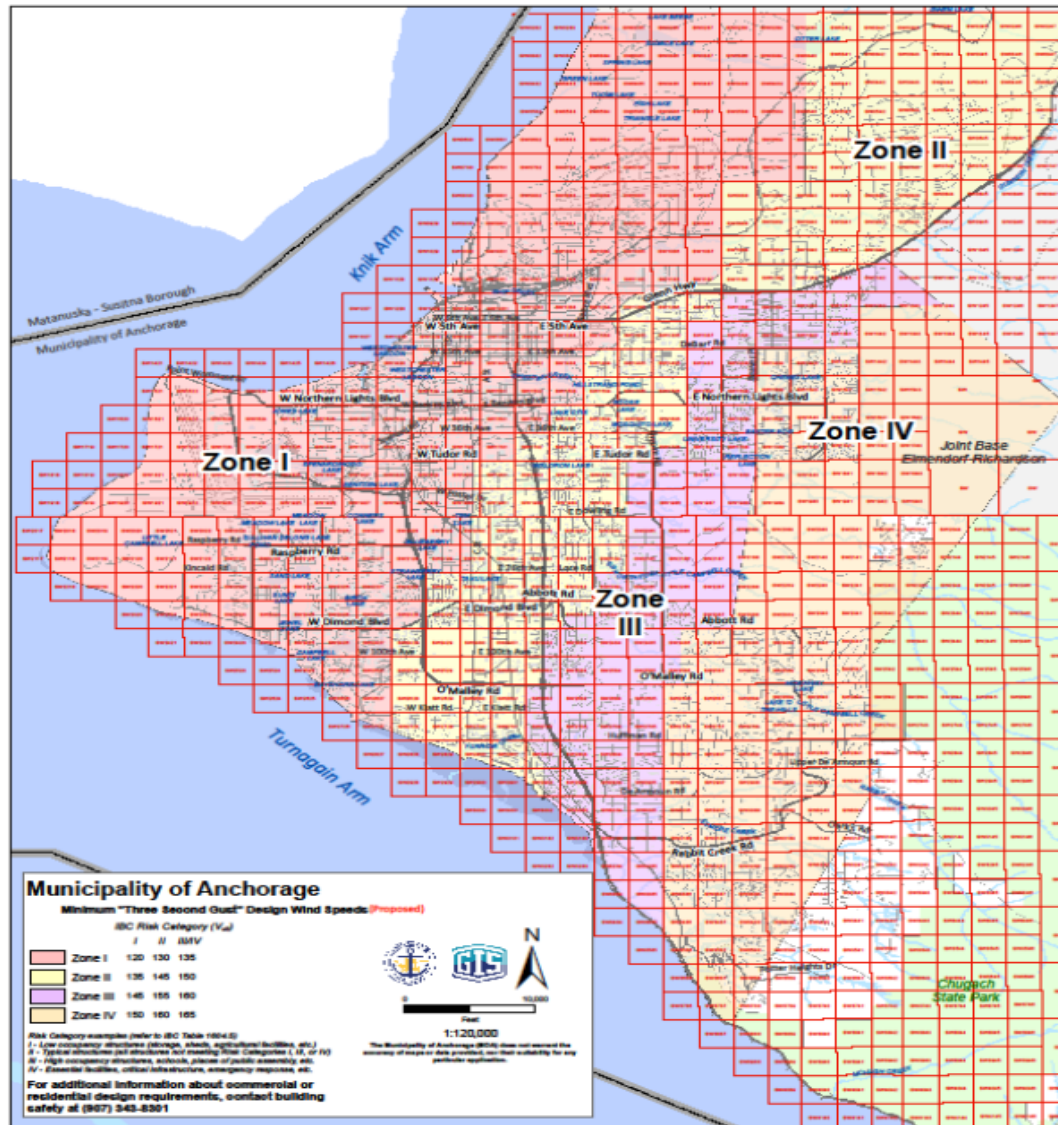
Add the following information to Table R301.2:

Ground snow load	50 PSF (allowable) 80 PSF (ultimate, for use with ASCE 7)
Wind Speed	See 23.85. Figure R301.2(5)A
Topographic effects	Per site
Special Wind Region	Per site
Windborne Debris Zone	No
Seismic Design Category	D 2
Subject to damage from: Weathering	Yes, severe
Frost Line Depth	See AMC 23.85 Table R403.1.
Termite	No
Winter Design Temperature	-7 Degrees Note this ASHRAE 99% design temperature may not be appropriate for all areas within the MOA.
Ice Barrier Underlayment Required	Yes
Flood Hazards	Yes, see flood hazard maps
Air Freezing Index	3500
Mean Annual Temperature	35°F

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23.85. Figure R301.2(2) Ultimate Design Wind Speeds.

Amend by deleting Figure R301.2(2) and replace with the following:
Anchorage Bowl "Three Second Gust" Wind Zone Map:



23.85.R301.2.1.1 Wind limitations and wind design required.

Delete from section in two places: "in a special wind region"

Add exception 4:

4. Single story accessory structures 600 square feet or less in gross floor area.

23.85. Table R302.1(1) Exterior walls.

Under the "Projections" row and "Minimum Fire Separation Distance" column, replace 5 feet with 3 feet (two occurrences).

23.85.R302.2.3 Continuity (townhouse fire-resistant construction).

Add the following subsections:

R302.2.3.1 Horizontal continuity. The fire resistance rated dwelling unit separation wall or walls shall be continuous from exterior wall to exterior wall and shall terminate at the interior surface of the exterior sheathing or siding.

R302.2.3.2 Exterior walls. Where the fire resistance rated wall assembly separating townhouses intersects the exterior wall, an (assumed) imaginary lot line shall extend outward from the intersection. The location of the imaginary lot line in relation to the exterior walls shall be such that the exterior wall fire resistance rating and opening protection meet the requirements set forth in section R302.1. Where the exterior walls on each side of the townhouse's separation walls form an angle equal to or greater than 180 degrees, exterior wall and opening protection is not required.

R302.2.3.3 Horizontal projecting elements. The fire resistance rated dwelling unit separation wall or walls shall extend to the outer edge of horizontal projecting elements such as balconies, roof overhangs, canopies, marquees, and similar projections that are within 4 feet of the separation wall.

Exceptions:

1. Horizontal projecting elements without concealed spaces.
2. Noncombustible horizontal projecting elements.
3. For combustible horizontal projecting elements with concealed spaces, the fire rated wall need only to extend through the concealed space to the other edges of the projecting elements. The exterior wall behind and below the projecting element shall be of not less than 1-hour-fire-resistant-rated construction for a distance not less than the depth of the projecting element on both sides of the fire rated wall. Openings within such exterior walls shall be protected by opening protection having a fire protection rating of not less than $\frac{3}{4}$ hour.

23.85.R302.2.4 Parapets for townhouses.

Add the following sentence to the exception:

The 4-foot dimension shall be measured from the centerline of the townhouse separation.

23.85.R302.2.7 Common wall insulation.

Add the following section:

R302.2.7 Common wall insulation. The dwelling unit separation wall shall be fire blocked at ceiling line and insulated in the attic directly above the fire blocking to the minimum required attic R-value.

23.85.R302.3 Two-family and three-unit dwellings.

Amend the first sentence by replacing "in two-family dwellings" with "in two-family and three-unit dwellings".

Add to the end of the paragraph:

A detached single family or two-family dwelling unit with an ADU (Accessory Dwelling Unit) is considered to be a two-family or three-unit dwelling, as the case may be, unless the ADU communicates freely with the single-family or one of the two-family dwelling units.

23.85.R302.3.1 Dwelling unit separation.

Add the following exception:

Exception: fire-resistance rated vertical and horizontal assemblies separating two units shall not be required where all the following are met:

1. One unit is considered subordinate to the other and shall be within or attached to an existing single-family home or existing townhouse.
Exception does not apply to new construction or structures with more than one dwelling unit.
2. Subordinate unit is maximum 1200 square feet and is smaller than the primary unit, but no smaller than 190 square feet.
3. Neither unit is used for any of the uses listed in the exception of R101.2.
4. The path of egress travel from the subordinate unit shall be independent of, and not pass through, the primary dwelling unit. This may be through a common hallway located within the building meeting the requirements of R302.3.6 (shared accessory rooms).
5. All smoke alarms and carbon monoxide alarms shall be interconnected between both the primary and subordinate unit per Section R310.4 and R311.5, respectively.
6. All other aspects of two-family dwelling units shall comply with the International Residential Code.

23.85.Table R302.3.6 Dwelling-Shared Accessory Room Separation.

Revise table by replacing all references to ½-gypsum board with 5/8-inch Type X gypsum board.

23.85.R302.3.7 Common wall insulation.

Add the following section:

R302.3.7 Common wall insulation. The dwelling unit separation wall shall be fire blocked at ceiling line and insulated in the attic directly above the fire blocking to the minimum required attic R-value.

23.85.R302.5.1 Opening protection.

Add to the end of the paragraph:

Doors shall have smoke gaskets along the top and sides and an adjustable threshold or sweep. Access from a garage to the crawlspace shall be in a wall and not through the floor. Access from a garage to the crawlspace shall be protected in accordance with this section.

23.85. Table R302.6 Dwelling-Garage Separation.

Amend table by replacing all references to 1/2-inch gypsum board with 5/8-inch Type X gypsum board.

23.85.R302.13 Fire protection of floors.

Add the following sentence to the end of exception 2:

Direct vent, sealed-combustion fuel fired appliances shall be allowed without floor protection.

23.85.R304.1 Location required (Protection of Wood and Wood-Based Products Against Decay).

Add the following sentence to the end of item number 5:

Measures should be taken to mitigate frost heaving if wood siding or sheathing has less than six-inch clearance.

Add item 10 and exception:

10. Wood structural members for decks not constructed with continuous protection similar to roofs.

Exception: Deck beams and joists where the entire member is painted or stained and the top is protected by 24-gauge galvanized sheet metal flashing with drip edge extending down the sides a minimum of 1/2" over ice and water shield.

23.85.R304.1.1 Field treatment.

Add the following sentence to the end of the paragraph:

This requirement only applies to glue-laminated timbers and AWW foundation walls.

23.85.R309 Automatic fire sprinkler systems.

Delete this section in its entirety.

23.85.R315.1 Sleeping lofts.

Revise the first line of the exception to read:

Areas that meet any of the following conditions shall not be considered a sleeping loft: [...]

23.85.R316.3 Story above grade plane.

Delete exception 4.

23.85.R319.2.3 Maximum height from floor.

Add exception as follows:

Exception: Clear opening shall be not greater than 48 inches above the floor in basements.

23.85.R319.7.1 Existing emergency escape and rescue openings.

Replace section with the following:

Where a change of occupancy would require an emergency escape and rescue opening, it shall be in accordance with Section R319.1.

23.85.R322.3 Care Facilities.

Delete this section.

23.85.R324.6.9 Testing and labeling.

Add the following exception:

Exception: In lieu of labels adhered to skylights, literature provided on site is acceptable to demonstrate skylights meet the criteria of this section.

23.85.R325.1.2 Natural ventilation.

Add exception 5 as follows:

5. Theater rooms are exempt from the ventilation requirements of this section.

23.85.R325.2 Bathrooms.

Delete this section. Reference the adopted plumbing code.

23.85.R327 Toilet, bath and shower spaces.

Delete this section in its entirety. Reference the adopted plumbing code.

23.85.R329.6 Roof access and pathways.

Add exception #5 as follows:

5. Roof access, pathways and setback requirements do not apply to photovoltaic systems installed on a single roof plane of a building having multiple roof planes where such roof plane is not located below or provides access to an emergency escape and rescue opening.

23.85.R329 6.2 Setback at ridge.

Replace R329.6.2 with the following:

Provide the following minimum clear setback at horizontal ridges where photovoltaic panels occupy:

1. Not more than 33 percent of the plan view total roof area: either 18 inches on both sides of the ridge or 36 inches on one side of the ridge.
2. More than 33 percent of the plan view total roof area: either 36 inches on both sides of the ridge or 48 inches on one side of the ridge.

23.85.R333 Moisture control in insulated assemblies.

Amend Chapter 3 by adding the following section:

SECTION R328 MOISTURE CONTROL IN INSULATED ASSEMBLIES

R333.1 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 7 and 9. Interior moisture control shall comply with section R333.1.1. 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.

R333.1.1 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 R806.5. Vapor diffusion through wall assemblies shall be controlled in accordance with section R702.7. The vapor retarder shall be continuous, and seams shall be lapped 6 inches minimum. Penetrations and seams shall be sealed with approved vapor retarder compatible tape or sealant to control air leakage. Where a vapor retarder is located in dropped ceilings adjacent to attics, the vapor retarder continuity shall be maintained above the dropped ceiling and shall be fully covered with a solid material such as gypsum wallboard, plywood, oriented strand board or other similar material.

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 such walls shall be insulated to a minimum 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. Four inches minimum of EPS or XPS foam plastic insulation applied directly against the exterior of the foundation wall.
- d. 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 $\frac{3}{4}$ inch plywood, OSB or other approved material having a perm rating meeting the class II requirements. Joints shall be sealed in an approved manner. Joint sealing is not required where the deck is covered with concrete or a gypsum based 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. Notwithstanding exception 3a, 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.
- 7. A class III vapor retarder may be used on walls and roof insulated to a minimum value of R-21 with spray foam having a minimum density of 2 pounds per cubic foot.

23.85.R401.1 Application.

Add to the exception item 3 as follows:

- 3. Repair of wood foundations with a crawlspace shall be per 23.85. Figure R403-34.

23.85.R401.3 Drainage.

Add the following sentence to the end of the paragraph:

There shall not be a net increase in surface drainage across property lines. Approved discharge locations shall include street gutters, drainage easements, ditches, or other approved locations. Surface runoff may be retained on site or follow existing drainage patterns to prevent adverse impact to neighboring properties.

23.85.R401.4 Soil tests.

Add the following subsection:

R401.4.3 Areas of high and very high Seismically induced ground failure susceptibility. The construction of a dwelling or accessory structure in seismically induced ground failure zones 4 or 5 (as delineated on the Municipality of Anchorage, Geotechnical Hazard Assessment Map) requires a site-specific geotechnical investigation in accordance with section 1803 of the 2018 IBC. The site-specific geotechnical investigation shall be prepared by a professional civil engineer, qualified in the field of Geotechnical Engineering, registered in the State of Alaska. The structure shall be designed and sealed by an Alaska licensed professional civil engineer with structural experience or professional structural engineer.

Exceptions:

1. A geotechnical report is not required for an addition to a detached single-family residence or duplex where all the following conditions apply:
 - a. The footprint of the addition does not exceed the footprint of the existing building;
 - b. The addition does not increase or exceed the number of stories of the existing building; and
 - c. Structural analysis demonstrates that new foundation elements can match existing.
2. A geotechnical report is not required for a detached accessory structure less than 400 square feet in area.
3. Unless required by a plat note, a registered engineer does not need to design either the structure or its foundation if the geotechnical report is based on site-specific soils information where all the following are true:
 - a. Slope Stability: A submitted pseudo-static slope stability analysis has a minimum factor of safety of at least 1.10 for seismic loading conditions in accordance with IBC 1803.5.11.
 - b. Liquefaction: The potential for liquefaction and soil strength loss evaluated in terms of peak ground acceleration, earthquake magnitude, and duration is unlikely.
 - c. Lateral Spreading and Pressure Ridges: The potential for earthquake induced lateral spreading and pressure ridges is unlikely.

23.85.R402.1 Wood foundations.

Add the following to the end of the section:

Wood foundations are not allowed on new construction. Repair of existing wood foundations shall be in accordance with this code.

23.85.R403.1 Footings - General.

Replace R403.1 through R403.1.3.6 and associated figures and Tables with the following:

1. Definitions:

- a. WARM FOUNDATION: Any foundation where the temperature of the bearing soils is normally maintained above freezing;
- b. COLD FOUNDATION: Any foundation where the temperature of the bearing soils is normally subjected to freezing.

2. Foundations shall be constructed as shown in Table 23.85.R403-16 and Figures 23.85.R403-25, 23.85.R403-29, 23.85.R403-31, 23.85.R403-34, and 23.85.R403-37 or foundations shall be designed under the provisions of the IBC. Footings and foundations shall be constructed of masonry or concrete. Footings of concrete and masonry shall be of solid material. Foundations supporting wood shall extend at least 6 inches above the adjacent grade. Unless other recommendations are provided by a foundation investigation report, footings shall meet the following requirements:

- a. Minimum footing depths shall be indicated in 23.85. Table R403.1. Footings shall bear on undisturbed natural inorganic soil, or suitably compacted fill.
- b. Cast-in place concrete piers shall be founded at a depth suitable for structural support or as indicated in 23.85. Table R403.1, whichever is greater. Connecting grade beams between piers on perimeter walls of warm buildings shall extend at least 36 inches below ground surface and shall be protected from frost heave. The potential for frost heave below grade beams of cold structure shall be accounted for in the design of these elements.
- c. All reinforcement in foundation walls shall be grade 60.
- d. All masonry shall be solid grout, Type M or S Mortar and mechanically consolidated.

23.85. Table R403-16 Reinforced concrete.

- 1. Reinforced concrete walls shall be anchored to all floors and roofs in accordance with section 1604.8.2 of the International Building Code.
- 2. All intersecting reinforced concrete walls shall be tied together. (ACI 318-14; 11.2.4.1)
- 3. All interior and exterior concrete walls shall be reinforced. Minimum yield strength - Grade 60. (ACI 318-14; 11.6)
- 4. All structural members framing into or supported on concrete walls or columns shall be anchored. (ASCE 7-16; 1211)

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5. All deformed reinforcing bars shall meet or exceed one of the listed ASTM requirements. (ACI 318-14; 20.2.1.3)
6. Concrete in seismic zone D shall have a minimum compressive strength of 3000 psi for severe exposure. (See IBC 1808.8.6; ACI 318-14; table 19.3.2.1)
7. The following minimum reinforcement requirements shall apply to all below grade concrete walls (i.e. basement walls and crawlspace walls). This reinforcing does not apply to above grade walls, which must be designed in accordance with the requirements of IBC.

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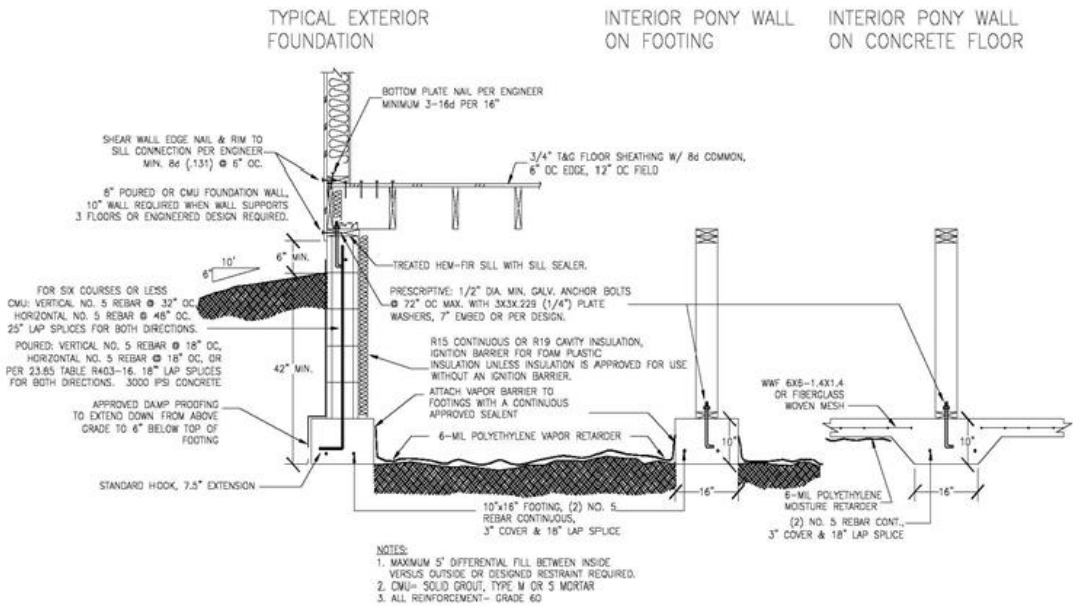
MINIMUM REINFORCEMENT FOR CONCRETE WALLS
(Horizontal and Vertical Spacing)

Width of Wall	#5 Bar	#4 Bar
6" Walls	#5 @ 18" O.C. hor.	#4 @ 16" O.C. hor.
	#5 @ 18" O.C. vert.	#4 @ 18" O.C. vert.
8" Walls	#5 @ 18" O.C. hor.	#4 @ 12" O.C. hor.
	#5 @ 18" O.C. vert.	#4 @ 18" O.C. vert.
10" Walls	#5 @ 15" O.C. hor.	#4 @ 10" O.C. hor.
	#5 @ 18" O.C. vert.	#4 @ 16" O.C. vert.

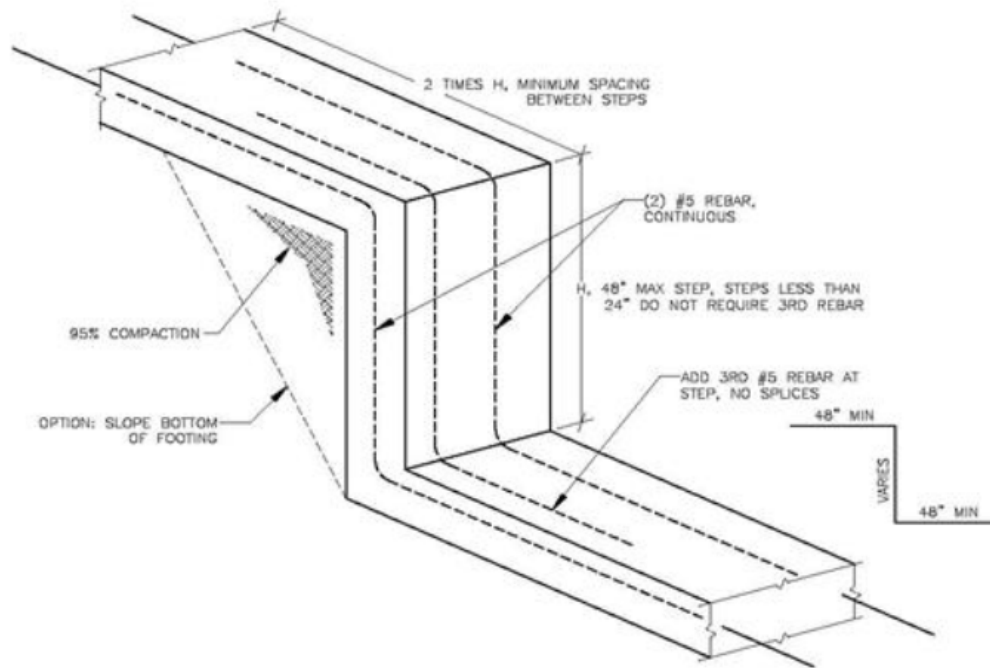
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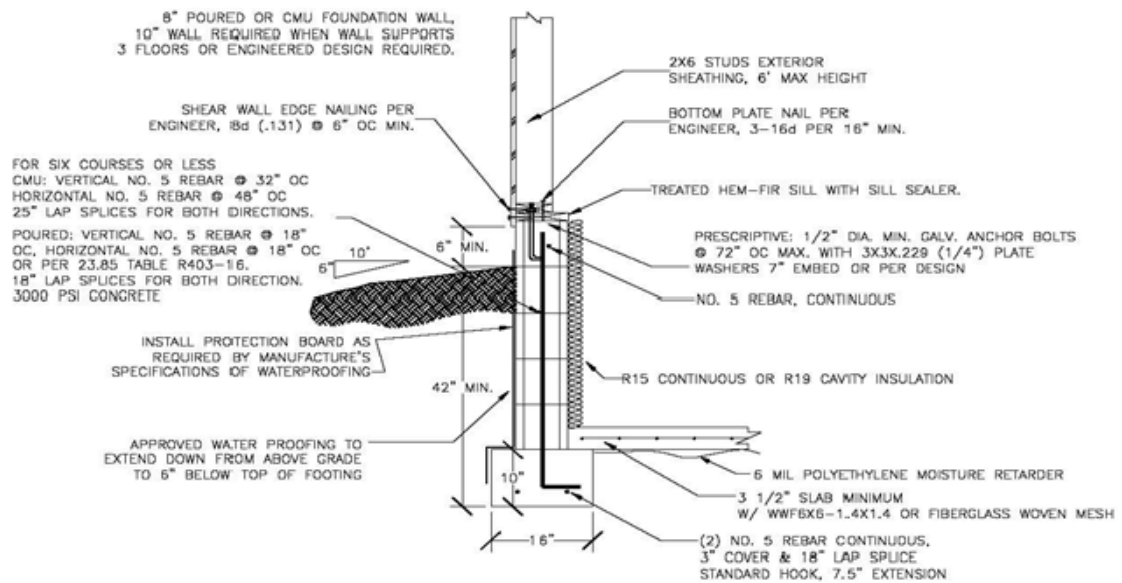
23.85. Figure R403-25 Typical foundation and footing details.



23.85. Figure R403-29 Typical step footing.



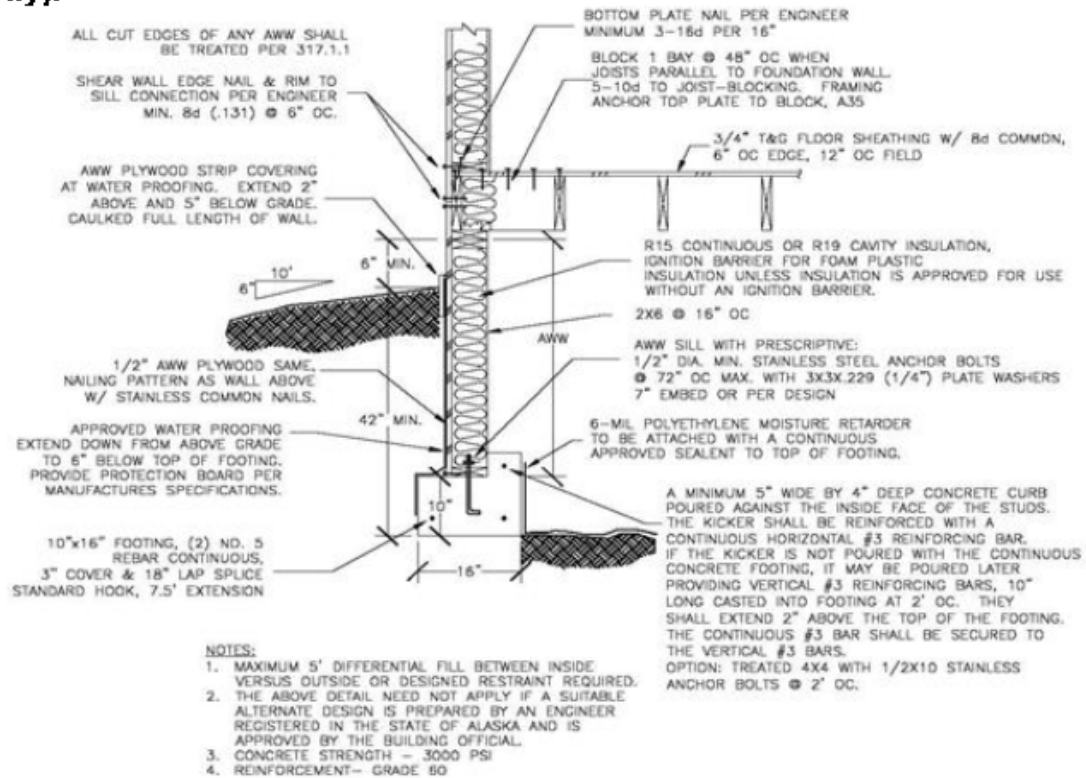
23.85. Figure R403-31 Typical pony wall for split level.



NOTES:

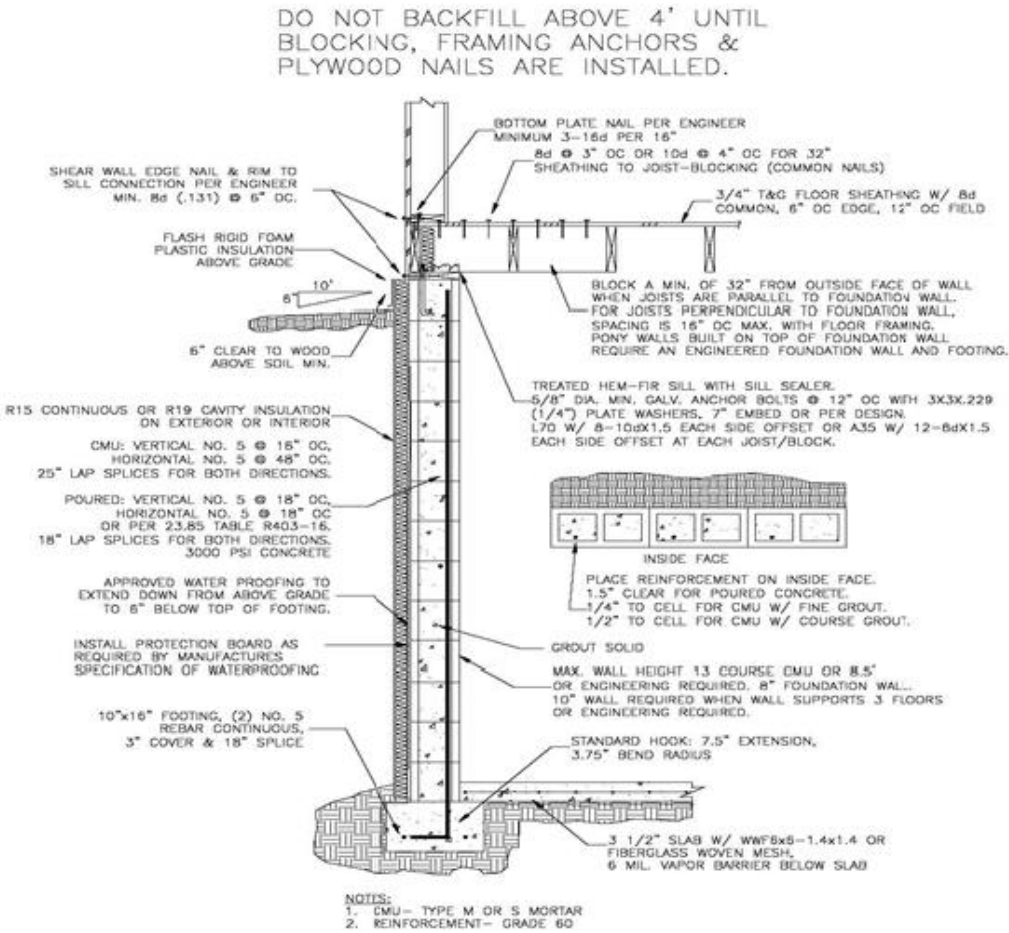
1. MAXIMUM 5" DIFFERENTIAL FILL BETWEEN INSIDE VERSUS OUTSIDE OR DESIGNED RESTRAINT REQUIRED.
2. CMU- SOLID GROUT, TYPE M OR S MORTAR
3. ALL REINFORCEMENT- GRADE 60

23.85. Figure R403-34 All weather wood foundation (For use in repairs only).



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23.85. Figure R403-37 Typical basement foundation wall.



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23.85. Table R403.1 Footing depths.

Foundation Type	Minimum Footing Depth (inches) ^{6, 7}	
	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

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- NOTES TO TABLE:
- (1) Dimension indicated is from bottom of footing to adjacent exterior grade. Basements or crawlspace walls supporting more than five feet 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) Except where exterior doors swing outward, exterior decks, landings, and platforms attached to the building and not greater

than 72 inches above grade may bear directly on ground. Bearing materials shall meet the other provisions of this code. The potential for and the effects of frost heave 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 other appropriate means. In addition, provisions shall be made to resist uplift forces due to frost jacking on the side of cold foundations.
- (5) The minimum footing depth for cold foundations installed in non-frost-susceptible material 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.
- (7) Footings or piers for single-family dwellings and their accessory structures in mobile home parks may be placed at surface grade, provided all applicable requirements are met for construction and installation in a mobile home park; see Appendix BA and local policies.

23.85.R403.2 Footings for wood foundations.

Delete paragraph and replace with the following:

Wood foundations are not allowed on new construction. Repair of wood foundations shall be in accordance with 23.85. Figure R403-34.

23.85. Table R403.3(1) Minimum Footing Depth and Insulation Requirements for Frost-Protected Footings in Heated Buildings.

Amend footnote (c) as follows:

- c. Insulation shall be expanded polystyrene (EPS) or extruded polystyrene (XPS) manufactured in accordance with ASTM C578. The following R-values shall be used to determine insulation thickness required for this application:
 - i. Type II EPS: R-3.2 per inch vertical and R-2.6 per inch horizontal;
 - ii. Type IX EPS: R-3.4 per inch vertical and R-2.8 per inch horizontal;
 - iii. Type X, IV, VI, VII and V XPS: R-4.5 per inch vertical and R-4.0 per inch horizontal.

For EPS insulation Types not listed, the R-value used to determine insulation thickness shall be 80 percent of the manufacturer listed R-value @75F for vertical insulation and 67 percent of the manufacturer listed R-value @75F for horizontal insulation. Reference ASCE Standard 32-01, Appendix A.

Delete footnotes (d) and (e).

23.85. Table R403.3(2) Air-Freezing Index for U.S. Locations by County.

Add Anchorage to the "3500" column in the Alaska row.

23.85.R404.1 Concrete and masonry foundation walls.

Delete sections R404.1.1 through R404.1.8.

Delete Tables R404.1.1(1) through R404.1.1(4), and R404.1.2(1) through R404.1.2(9), and Figure R404.1.5(1).

See 23.85.R403.1.

23.85.R404.2 Wood foundation walls.

Delete section R404.2. Wood foundations are not allowed on new construction. Existing wood foundations shall be repaired in accordance with 23.85. Figure R403-34 All Weather Wood Foundation.

23.85.R404.3 Wood sill plates.

Delete paragraph and substitute with the following:

Wood sill plates shall be minimum 2-inch by 6-inch and shall be bolted to the foundation or foundation wall with not less than 10-inch by ½-inch nominal diameter galvanized steel bolts embedded at least 7 inches into the concrete or in fully grouted cells of reinforced masonry and spaced not more than 6-feet apart. There shall be a minimum of two bolts per piece with one bolt located within 12 inches of each end of each piece. Wood sill plates must be a treated material specified in Section R317.1.

23.85.R404.6 Insulating concrete form (ICF) foundation walls.

Amend section 404 by adding the following subsection:

R404.6 Insulating concrete form (ICF) foundation walls. Only flat insulating concrete form (ICF) wall systems shall be used with reinforcement per 23.85. Table R403-16.

23.85.R405.1.1 Precast concrete foundation.

Delete section R405.1.1.

23.85.R406.1 Concrete and masonry foundation dampproofing.

In the first sentence beginning with the word "enclose", replace the wording in the rest of the sentence with the following: "crawl space walls 40 inches or less in height shall be damp-proofed from above grade to 6 inches below the top of the footing."

Add exception #2 as follows:

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

23.85.R406.2 Concrete and masonry foundation waterproofing.

Replace the first sentence with the following:

Exterior foundation walls that retain earth and enclose habitable or usable interior spaces and floors below grade shall be waterproofed from above grade to 6 inches below the top of the footing.

Add exception #2 as follows:

2. Foundation walls backfilled on both sides, such as those used in conjunction with a "slab on grade" do not require waterproofing.

23.85.R406.3 Dampproofing for wood foundations.

Replace "dampproofing" in the heading and body of section with "waterproofing".

23.85.R406.3.2 Below grade moisture barrier.

Revise R406.3.2 to read as follows:

Approved waterproofing shall be applied over the below-grade portion of exterior basement and crawlspace walls prior to backfilling. A treated lumber or plywood strip shall be attached to the wall to cover the top edge of the approved waterproofing. The wood strip shall extend at least two inches above and five inches below finish grade level to protect the approved waterproofing from exposure to light and from mechanical damage at or near grade. The joint between the strip and the wall shall be caulked full length prior to fastening the strip to the wall. Alternatively, brick, stucco, or other covering appropriate to the architectural treatment may be used in place of the wood strip. The approved waterproofing shall extend down from above grade to six inches below the top of the footing.

23.85.R406.4 Precast concrete foundation system dampproofing.

Replace paragraph with the following:

See Sections 23.85.R406.1 and 23.85.R406.2 for requirements.

23.85.R407.2 Steel column protection.

Replace paragraph with the following:

Exterior surface of steel columns exposed to the elements shall be protected with a rust inhibitive paint, except for corrosive-resistant steel and steel treated with coatings to provide corrosion resistance.

23.85.R506.3.3 Vapor retarder.

Delete item #1 under the exception.

23.85.R507.1 Decks.

Replace “indicated in Table R301.2” with “as determined by section R301.2.3.

23.85.R507.3.3 Frost Protection.

Add exception as follows:

Exception: Frost protection for deck stair footings shall not be required where not directly attached to or in contact with the frost protected structure.

23.85.R507.9.1.5 Ledger Flashing.

Replace 4 inches with 1 inch and add “exterior” before ledger face.

23.85.R507.10 Exterior Guards.

Delete section R507.10.

23.85.R602.3.2 Top plate.

Delete the exception.

23.85.R602.6 Drilling and notching of studs.

Amend section by adding item 3 as follows:

3. All studs in walls containing plumbing drains and vents shall be a minimum of 6-inch nominal width or structurally sheath one side when 4-inch nominal width studs are used.

23.85.R702.7.1 Class III vapor retarders.

Delete section R702.7.1. Reference 23.85.R328.

23.85.R703.2 Water-resistive barrier.

Amend the first sentence by starting the sentence with:

"Though not required by the Municipality of Anchorage, when installed or when required by the exterior wall covering manufacturer, apply..."

23.85.R703.4.1 Flashing installation at exterior window and door openings.

Add exception 4:

4. Where flashing cannot be installed per one of the above referenced methods, the exterior opening shall be caulked and sealed with exterior grade, paintable caulk, a minimum of a $\frac{3}{8}$ -inch bead.

23.85.R703.5.2 Panel siding.

Add the following to the end of the paragraph:

Exterior type plywood siding with a grooved pattern shall not be installed horizontally and used as the weather resistant siding.

23.85.R802.2 Design and construction.

Add a sentence to end of paragraph as follows:

The minimum depth from the roof sheathing to the wall top plate at exterior side of the exterior wall shall be 11¼ inches.

23.85.R802.10.1 Truss design drawings.

Amend first sentence by deleting the words: "and approved prior to installation."

23.85.R802.12 Wood frame roof attachment at eave - blocking.

Amend section R802 by adding the following section:

R802.12 Wood frame roof attachment at eave blocking. The following 5 options are an acceptable means for transferring roof diaphragm shear forces to exterior walls. Alternative designs based on calculations for shear transfer to the exterior walls may be used in lieu of these details.

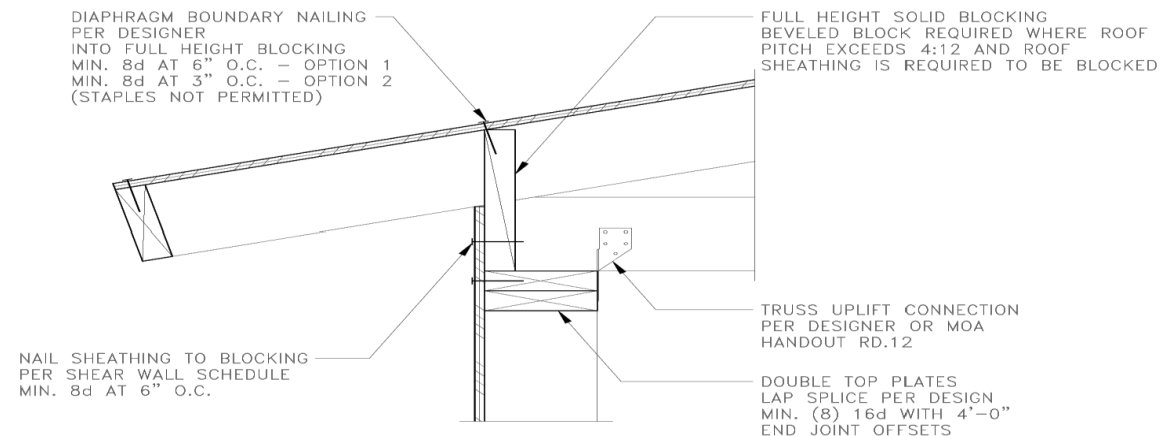
Regardless of the method selected, roof ventilation shall comply with section R806.

OPTION 1

Full-height blocking in every truss space with 3 or more 2-inch diameter or larger holes located near the top of block.

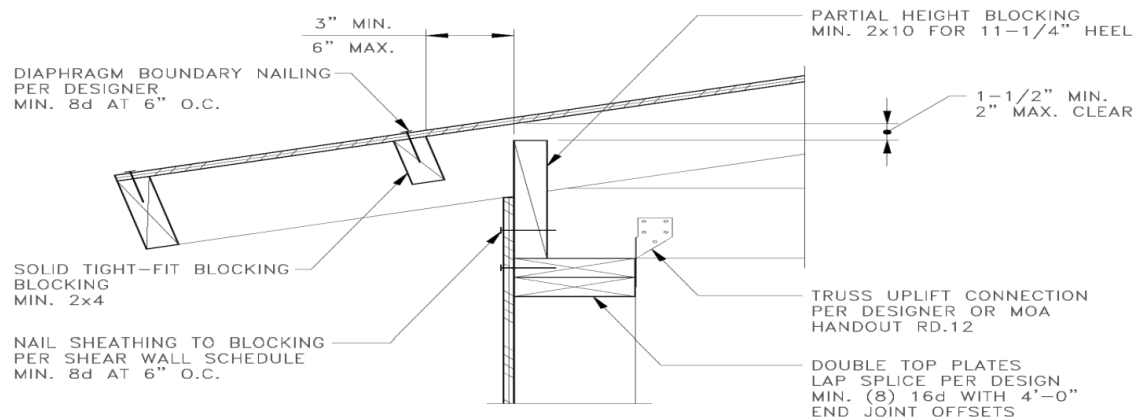
OPTION 2

Full-height blocking in every other truss space with 3 or more 2-inch diameter or larger holes located near the top of block, with partial height blocking in alternate spaces. Partial height blocking shall allow a clear air gap of between 1½ to 2 inches. Minimum size partial height block is 2×10 where truss heels are 11¼ inches high.



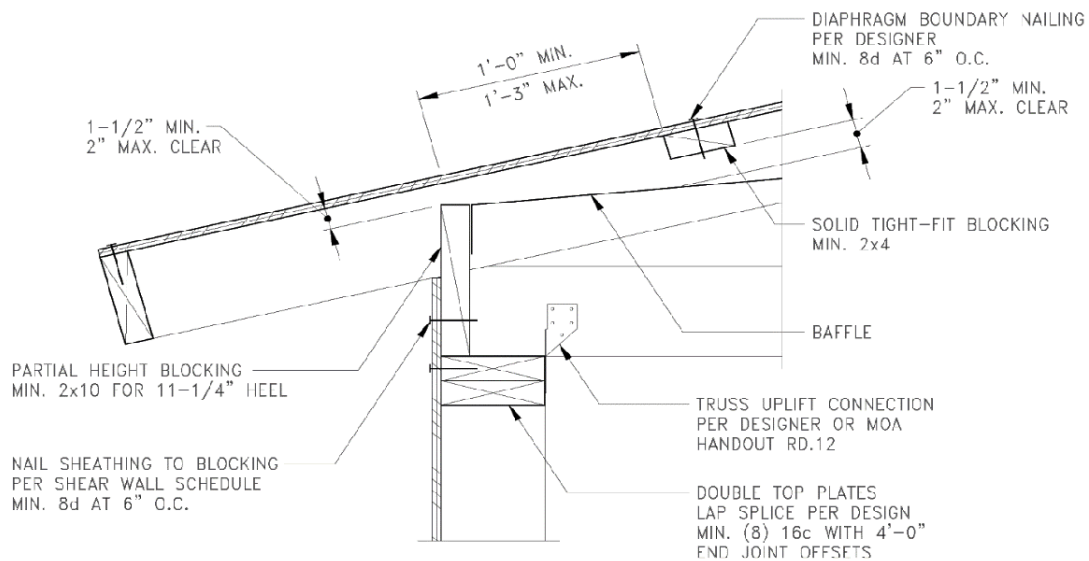
OPTION 3

This partial height blocking configuration may be used where trusses have of 11¼ inch heels at the wall line. Blocking is required in every truss space.



OPTION 4

This partial height blocking configuration may be used where diaphragm shear is less than 95 plf. Blocking is required in every truss space.



LIMITATIONS:

1. ROOF SLOPE SHALL BE EQUAL TO OR STEEPER THAN 3:12 PITCH
2. TRUSS TCP CHORD SHALL BE 2x6 OR GREATER

OPTION 5

For prescriptively braced wall panels and engineered shear wall designs for one- and two-family dwellings and townhomes, this configuration, as described in R602.10.8.2.2, may be used.

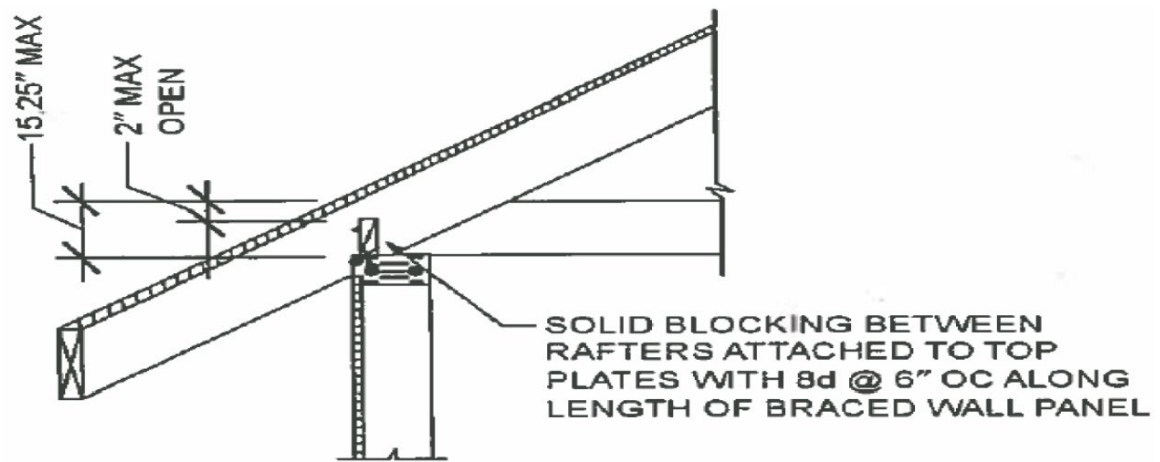


FIGURE R602.10.8.2(1)
BRACED WALL PANEL CONNECTION TO PERPENDICULAR RAFTERS

23.85.R806.2 Minimum vent area.

Add the following after the first sentence:

Between 50 percent and 75 percent of the required ventilating area shall be provided by ventilators located in the upper portion of the attic or rafter space, with the balance of the required ventilation provided at the eaves.

Any additional ventilation provided over the required will not be restricted.

Upper ventilators shall be located no more than 3 feet below the ridge or highest point of the space, measured vertically. Where the location of wall or roof framing members conflicts with the installation of the upper ventilators, installation more than 3 feet below the ridge or highest point of the space may be permitted.

Delete the exception.

23.85.R807.1 Attic access.

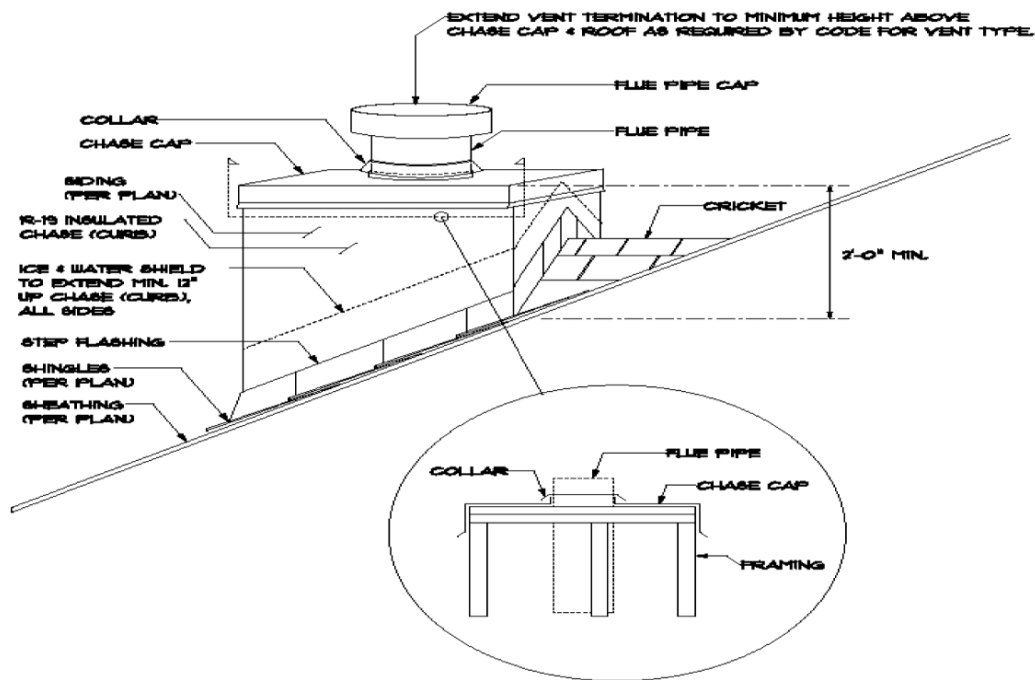
Add the following to Section:

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

23.85.R903.1 General.

Add the following to the end of section:

1. All valleys shall have a modified bitumen ice barrier lapped eighteen inches minimum each side of valley centerline.
2. All roof penetrations shall be located a minimum of six feet from valley centerline and four feet from the exterior wall line at the eave measured on a horizontal plane, excluding attic ventilation.
3. Type B gas vents may penetrate the eave ice barrier area if installed within a wood framed, R-21 insulated curb, minimum 24 inches tall as measured on the ridge side of the roof. The ice barrier must extend up the curb a minimum of 12 inches on all sides. See detail below.



23.85.R903.4.2 Snow impact on neighboring lot.

Amend section R903.4 by adding the following subsection:

R903.4.2 Snow impact on neighboring lot. Snow from a structure shall not shed across property line.

23.85.R905.1.2 Ice barrier.

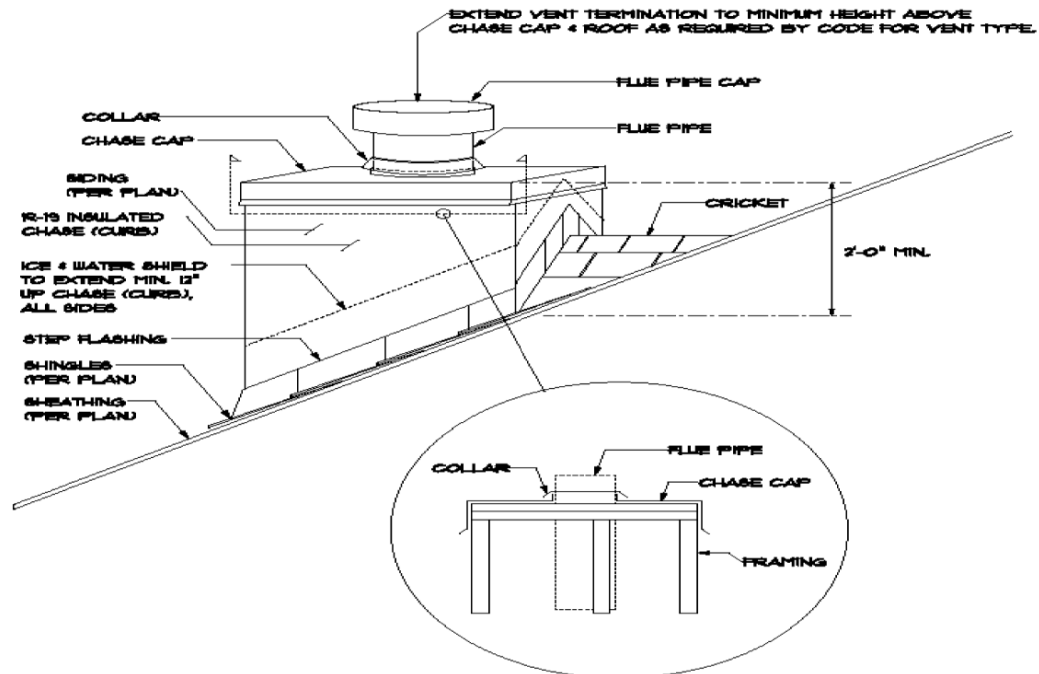
Replace section with the following:

An ice barrier shall be a self-adhering polymer modified bitumen sheet complying with ASTM D 1970. For slopes less steep than, but not including, 4V:12H, an ice barrier shall be used over the entire surface of the roof. No additional normal underlayment is required. For slopes 4V:12H and steeper an ice barrier shall extend from the lowest edges of all roof surfaces to a point at least 36 inches inside the exterior wall line of the building. The remainder of the roof surfaces may be covered with underlayment per 23.85.R905.1.1.

23.85.R905.1.2.1 Penetrations in ice barrier

1. All valleys shall have a modified bitumen ice barrier lapped eighteen inches minimum each side of valley centerline. No penetrations shall be located in required valley ice barrier.
2. All roof penetrations shall be located a minimum of six feet from valley centerline and four feet from the exterior wall line at the drip edge eave measured on a horizontal plane, excluding attic ventilation.
3. All roof penetrations shall extend above the roof surface a minimum of 24 inches, except attic ventilation.

4. Type B gas vents may penetrate the eave ice barrier area if installed within 24 inches, wood framed, R-21 insulated curb, measured on the ridge side of the roof. The ice barrier must extend up the curb a minimum of 12 inches on all sides. See detail below.



23.85.R905.2.8.2 Valleys (asphalt shingles).

Replace items 1, 2, and 3 with the following:

1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be not less than 24 inches wide and of any of the corrosion-resistant metals in table R905.2.8.2 installed over the required 36-inch wide self-adhering polymer modified bitumen underlayment complying with ASTM D 1970.
2. For open valleys (valley lining exposed) lined with one ply of mineral-surfaced roll roofing, complying with ASTM D 3909 or ASTM D 6380 Class M, 36" wide installed over the required 36" wide self-adhered polymer modified bitumen underlayment complying with ASTM D 1970.
3. For closed valleys (valley covered with shingles), valley lining of one layer of self-adhered polymer modified bitumen underlayment, minimum 36" wide, complying with ASTM D 1970 shall be permitted.

23.85.R905.2.8.3 Sidewall flashing.

Delete the words "continuous or" in the first sentence and the word "continuous" in the second sentence.

23.85.R905.2.8.5 Drip edge.

Add the following exception:

Exception: A 1x drip edge installed at the top of the fascia shall be permitted where the roof shingles overhang the 1x at least 1-inch.

23.85.R905.9.1 Slope (built-up roofs).

Delete the words:

"except for coal-tar built-up roofs, which shall have a design slope of a minimum one-eighth unit vertical in 12 units horizontal (1-percent slope)."

23.85.R1005.8 Insulation shield.

Add to the end of the paragraph:

If the manufactures recommendations do not require a clearance from insulation, an insulation shield (thimble) is not required.

23.85.N1101.5 Information on construction documents.

Delete section. Refer to Anchorage Administrative Code.

23.85.N1101.6 Defined terms.

Add the following terms:

AHFC. Alaska Housing Finance Corporation.

AK HERS Guidelines. AHFC Alaska Home Energy Rating System Guidelines.

AKWarm. AHFC approved home energy rating system computer-simulation software.

ASHRAE. The American Society of Heating, Refrigerating and Air-Conditioning Engineers.

BEES. AHFC Building Energy Efficiency Standard, established by the State of Alaska. BEES is comprised of the 2018 International Energy Conservation Code, ASHRAE Standard 62.2 2016, and the Alaska Specific Amendments.

23.85.N1101.10.4 Insulation product rating.

Add the following exception:

Exception: A mean testing temperature of 40° F is acceptable for demonstrating compliance with this code.

23.85.N1101.13 Application.

Amend first sentence to read as follows:

Residential buildings shall comply with Section N1101.13.1 or N1101.13.2.

Delete subsections N1101.13.3 and N1101.13.4.

23.85.N1101.14 Certificate.

Replace first sentence with the following:

A permanent certificate shall be completed by the Energy rater, builder or other approved party and made available to the owner by posting it on a wall in the space where the furnace is located, a utility room, electrical panel or an approved location inside the building.

Add the following exception:

Exception: A certificate is not required for an addition, alteration, or repair to an existing building.

23.85. N1102.1.2 Insulation and fenestration criteria.

Add the following to end of paragraph:

Where constructing an assembly with both continuous exterior insulation and stud cavity insulation, a dew-point calculation is required to demonstrate condensation within the assembly is adequately addressed.

Exception: A dew-point calculation is not required when utilizing a class I or II vapor retarder on the interior side of frame walls.

23.85.Table N1102.1.2 Maximum Assembly U-Factors and Fenestration Requirements.

Replace the Table N1102.1.2 and footnotes with the following:

Table N1102.1.2 U-Factors and Fenestration Requirements Climate Zone 7		
Component	Approvable Maximum U-Factor or F-Factor¹	Enhanced Maximum U-Factor or F-Factor¹
Fenestration	U-0.32	U-0.27
Skylight	U-0.55	U-0.50
Ceiling	U-0.026	N/A
Insulation entirely above roof deck	U-0.033	U-0.028
Wood Framed Wall	U-0.047	U-0.045
Mass Wall	U-0.057	N/A
Floor over Unheated Areas	U-0.028	N/A
Basement Wall	U-0.05	N/A
Unheated Slab on Grade (see N1102.2.10)	F-0.51	F-0.48
Heated Slab on Grade (see N1102.2.10)	F-0.66	F-0.66
Crawlspace wall	U-0.055	N/A

¹ Use of opaque assembly U-factors, C-factors, and F-factors from ANSI/ASHRAE/IESNA 90.1 Appendix A is permitted, provided the construction complies with the applicable construction details from ANSI/ASHRAE/IESNA 90.1 Appendix A

23.85. Table N1102.1.3 Insulation Minimum R-Values and Fenestration Requirements by Component.

Replace the Table N1102.1.3 and footnotes with the following:

Table N1102.1.3 Insulation and Fenestration Requirements by Components Climate Zone 7		
Component	R-Value (Minimum)	R-Value (Enhanced)
Fenestration	3.1	3.7
Skylight	1.8	2
Ceiling	49	N/A
Insulation entirely above roof deck	30ci	35ci
Wood Framed Wall	21	20+5ci or 13+10ci
Mass Wall	21	N/A
Floor over Unheated Areas	38 or 19+10ci	N/A
Basement Wall	15ci or 19 or 13+5ci	N/A
Unheated Slab on Grade (see N1102.2.10)	10ci, 36 inches	10ci, 48 inches
Heated Slab on Grade (see N1102.2.10)	10ci, 36 inches, and 5 full slab	10ci, 48 inches, and 5 full slab
Crawlspace wall	15ci or 19 or 13+5ci	N/A

Note: ci = Continuous Insulation.

23.85.N1102.2.1 Ceilings with attics.

Add to the end of the section the following:

A minimum 11.25-inch truss heel height is required. Insulation R-values may be lower at eaves to allow for proper ventilation.

23.85.N1102.2.5.1 Access hatch and door insulation installation and retention.

Add after "weatherstripped" in the first sentence "and sealed to prohibit air movement".

23.85.N1102.2.11 Crawlspace walls.

Revise the section to read as follows:

Crawlspace walls shall be insulated, and a ground vapor retarder shall be installed in accordance with 23.85. Figure R403-25. Crawlspace wall insulation shall be securely fastened in place and shall extend downward from the floor to the top of the footing. Vapor retarder joints shall overlap 6 inches minimum and be sealed or taped. Vapor retarder edges shall extend not less than 6 inches up and be attached to the footing/stem walls.

23.85.N1102.5.1.3 Maximum air leakage rate.

Replace the first sentence and items 1 and 2 with the following:

Where tested in accordance with Section N1102.5.1.2, the building or dwelling units or sleeping units in the building shall have an air leakage rate not greater than 3 air changes per hour, or 0.22 cubic feet per minute per square foot of the building thermal envelope area or the dwelling testing enclosure area, as applicable.

Exceptions are to remain.

23.85.N1103.3.2 Building Cavities.

Add the following exception:

Stud wall cavities and the spaces between solid floor joists may be used as air plenums for other than supply air where all the following conditions apply:

1. Such cavities or spaces shall not be part of a required fire-resistance-rated assembly.
2. Stud wall cavities shall not convey air from more than one floor level.
3. Stud wall cavities and joist space plenums shall be isolated from adjacent concealed spaces by tight fitting fire blocking in accordance with R602.8.
4. Stud wall cavities in the outside walls of building envelope assemblies shall not be utilized as air plenums.

23.85.N1103.3.3 Ductwork located outside conditioned space.

Delete section N1103.3.3. See AMC 23.85.N1103.3.4.

23.85.N1103.3.4 Duct systems located in conditioned space.

Replace section with the following:

Ducts are to be installed inside the continuous air barrier and building thermal envelope of the dwelling.

Exception: Ducting for ventilation systems.

23.85.N1103.3.5 Ductwork buried within ceiling insulation.

Delete section N1103.3.5 and subsection N1103.3.5.1. See AMC 23.85.N1103.3.4.

23.85.N1103.3.7 Duct system testing.

Add item 4 to exceptions as follows:

4. A duct air-leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.

23.85.N1103.4 Mechanical system piping insulation.

Add the following exception:

Exception: Piping installed within the building thermal envelope.

23.85.N1103.6 Mechanical ventilation.

Amend section to read as follows:

Ventilation shall be provided in accordance with ANSI/ASHRAE Standard 62.2-2019 . Compliance with AHFC Alaska Specific Amendments is optional.

23.85.N1103.6.3 Testing.

Delete section, testing not required.

23.85.N1103.7 Equipment sizing and efficiency rating.

Add the following exceptions:

Exceptions:

1. AkWarm is an approved heating load calculation methodology.
2. Equipment shall be sized to meet the load and oversizing shall not exceed 125 percent. When this is not feasible given the discrete size options available, equipment delivering the smallest output while satisfying the calculated load shall be used.

23.85.N1103.13 Gas fireplaces.

Add to the end of the exception the following:

or gas-fired appliances manufactured prior to the adoption of this code.

23.85.N1105.1 Scope (Total building performance).

Add an exception as follows:

Exception: Compliance with section N1105 may be demonstrated through an AHFC approved home energy rating program that meets the following:

- a. A minimum five-star rating is required.
- b. The maximum air infiltration rate shall not exceed 3 air changes per hour at 50 pascals pressure difference.
- c. The compliance rating shall be performed by a person authorized by AHFC.
- d. Compliance with section 1105.3 is not required.

23.85.N1108.1 Scope (Additional energy efficiency requirements).

Replace section with the following:

This section provides additional energy efficiency options and shall not be considered mandatory.

23.85.N1109.1 Scope (Existing buildings – general).

Add exception as follows:

Exception: Additional efficiency credit requirements for alteration, repair, and addition to existing building and structures are elective only and shall not be required by code. This does not include change of use that increases the energy use of the structure.

23.85.N1110.2.5 Building thermal envelope (alterations).

Rewrite the exception as follows:

Exception: The following alterations shall not be required to comply with the requirements for new construction provided that the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation.
3. Construction where the existing roof, wall or floor cavity is not exposed.
4. Roof recover.
5. Roof replacement where roof assembly insulation is integral to or located below the structural roof deck.
6. Roof replacement where roof assembly insulation is above the roof deck and the insulation cannot be increased without modifying the structure to support full snow load.
7. Surface-applied window film installed on existing single-pane fenestration assemblies to reduce solar heat gain provided that the code does not require the glazing or fenestration assembly to be replaced.

23.85. Chapters 12 through 43.

Amend by deleting in their entirety Chapters 12 through 43, except for the specific sections referenced by the adopted provisions of this code.

23.85. Appendices.

Adopt Appendices as listed in AMC 23.05.010. Local amendments to appendices as follows.

23.85.BA101.1 General.

Amend the first sentence to read:

These provisions shall apply to manufactured homes serving as detached single-family dwelling units placed either on private (non-rental) lots or within mobile home parks licensed by the Municipality of Anchorage, and shall apply to the following:

23.85.BA102.7 Mobile homes, campers, and travel trailers.

Add the following section:

23.85.BA102.7 Mobile homes.

23.85.BA102.7.1 Mobile homes. Every mobile home built prior to June 15, 1976, shall be labeled as required in Section AE201, and shall conform to all of the following:

1. **FIRE WARNING SYSTEM** - Smoke detectors shall be provided with in accordance with Chapter 3.
2. **FIRE PROTECTION** - Each mobile home shall be equipped with at least one 2-A rated portable fire extinguisher installed in accordance with NFPA 10-2018.
3. **ELECTRICAL SYSTEM** - All electrical equipment, wiring, and appliances shall be installed per Building Safety Handout No. R.10 Mobile Home Set-Up and Permit Requirements, as maintained by the Building Official.
4. **MECHANICAL SYSTEM** - All heating equipment shall be maintained in a safe condition. Additions, alterations, repairs and replacements shall comply with manufacturer's instructions and the currently adopted editions of the International Mechanical Code and the International Fuel Gas Code.
5. **PLUMBING SYSTEM** - All plumbing facilities shall be maintained in a safe and sanitary condition. Additions, alterations, repairs and replacements shall comply with manufacturer's instructions and the currently adopted edition of the Uniform Plumbing Code.
6. **EXIT FACILITIES** - Mobile homes shall have a minimum of two external doors located remotely from each other and so arranged as to provide means of unobstructed travel to the outside of the mobile home.
7. **GROUND FAULT CIRCUIT INTERRUPTER (GFCI)** - Outlets shall have GFCI protection in accordance with the currently adopted edition of the National Electrical Code (NEC).

23.85.BA201 Definitions.

Add the following:

MOBILE HOME PARK. Any parcel or adjacent parcels of land in the same ownership which is utilized for occupancy by more than two mobile homes.

This term shall not be construed to mean tourist facilities for parking of travel trailers or campers.

MANUFACTURED HOME:

Add the following at the end of the first paragraph:

Each manufactured home shall bear a certification label in accordance with the Manufactured Home Standards.

MANUFACTURED HOME STANDARDS:

Add the following to the definition:

Every manufactured home installed in the Municipality of Anchorage must be certified for the "North Zone" for snow load (40 pounds per square foot) and heat loss "Comfort Zone 3" in accordance with HUD standards.

23.85.BA104.1 Initial installation.

Add the following after the word "be" in the first sentence of the first paragraph:

...constructed, located, moved, set-up or...

23.85.BA104.5 Gas and plumbing service.

Add the following section:

BA104.5 Gas and plumbing service. The owner of a manufactured home or a licensed mobile home contractor may install or retrofit gas piping, gas appliances, or plumbing only under the following conditions:

1. The owner performing such work shall be a current occupant of the manufactured home and shall personally perform all work.
2. A licensed mobile home contractor may perform work on gas and plumbing utility connections only by use of a licensed journeyman plumber or journeyman gas fitter who is an employee of the contractor. All such work shall bear a tag with the identification number of the journeyman plumber or journeyman gas fitter who performs the work.
3. Except as provided in items 1 and 2 of this section, all plumbing, gas piping, or gas appliance retrofit work shall be performed by a licensed plumbing or gas contractor.
4. No person may pipe natural gas to service gas fired equipment unless:
 - a. Such equipment has been certified by the manufacturer as being suitable to that use; and
 - b. Such equipment has first been converted for use of natural gas.

23.85.BA105.4 Who may apply.

Add the following section:

BA105.4 Who may apply. Only the owner of a manufactured home or a licensed mobile home contractor may apply for a permit under this Section.

23.85.BA110.1 General (Utility service).

Add the following sentence to the end of this section:

All sewer, electricity, gas, and water services shall be installed and maintained in a safe manner in accordance with the appropriate adopted codes.

23.85.BA114.3 Footings and foundations.

Replace the last sentence of the first paragraph with the following:

Footings shall have a minimum depth of 42 inches below exterior grade unless a greater depth is required by the Building Official based on a foundation investigation or other information.

Add the following exception:

Exception: Footings or piers in mobile home parks may be placed at surface grade, provided all other requirements are met.

23.85.BA114.6 Under-floor clearances-ventilation and access.

Add the following to the second paragraph:

Where combustion air is not taken from the crawl space, and where the floor area of the home does not exceed 800 square feet, the ventilation requirement may be met by operable vents of 8 inches by 16 inches installed in skirting not less than 18 inches above exterior grade at opposite ends of the manufactured home.

23.85.BA115.1 Skirting and permanent perimeter enclosures.

Replace the first sentence of the first paragraph with the following:

Every manufactured home shall be skirted around its perimeter from the floor line to exterior grade with a skirting material having an insulation value of R-19 as published by the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE). A minimum of 6 mil polyethylene film vapor retarder shall entirely cover the soil surface of the crawl space.

23.85.BA124.1 Ground anchors.

Replace the first paragraph with the following:

Ground anchors shall be designed and installed to resist overturning and lateral movement of the manufactured home, and shall extend at least 60 inches below exterior grade, or deeper if required by the Building Official because of poor soils. Ground anchors shall be installed for every manufactured home, except where a permanent foundation bearing at least 42 inches below grade is demonstrated by calculation to resist the forces as determined by Chapter 16 of the International Building Code.

23.85.BG101.1 General.

Add after first paragraph:

Exceptions:

1. Accessory dwelling units as defined by AMC Title 21.
2. Existing wall and floor-ceiling assemblies.

Section 14. Anchorage Municipal Code Chapter 23.110 is hereby repealed in its entirety and replaced with the following:

**Chapter 23.110 LOCAL AMENDMENTS TO THE INTERNATIONAL
FUEL GAS CODE**

The amendments to the International Fuel Gas Code (IFGC) 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.

23.110.101.2 Scope.

Delete the exception.

23.110.103—23.110.114.

Delete sections 103 through 114. Refer to the Anchorage Administrative Code.

23.110.103 Authority to render gas service.

Amend Chapter 1 by adding section 103 as follows:

103 Authority to render gas service.

103.1 Unlawful acts. It shall be unlawful for any person, firm, or corporation, excepting an authorized agent or employee of a person, firm, or corporation engaged in the business of furnishing or supplying gas and whose service pipes supply or connect with the particular premises, to turn on or reconnect gas service in or on any premises where and when gas service is, at the time, not being rendered.

103.2 Authority to disconnect. The administrative authority or the serving gas supplier is hereby authorized to disconnect any gas piping or appliance, or both, found not to conform to the requirements of this code or found defective and in such condition as to endanger life or property. Where such disconnection is made, a notice shall be attached to such gas piping, appliance, or both stating the same has been disconnected, together with the reasons, therefore.

23.110.202 General definitions.

Add the following definition:

CONNECTOR, FUEL GAS PIPING. A fitting that is used at all points where fuel gas piping enters or leaves the ground. The connector shall be capable of absorbing a displacement due to frost heave action. An example for low pressure systems would be a Dormont flex. An example for medium pressure would be CSST. An example for diameters greater than two inches would be a braided metal flex connector. (See amendment to section 404 Piping System Installation.) Rubber flexible connectors are not approved.

23.110.302.7 Roof penetrations.

Add the following section:

302.7 Roof penetrations. For roof construction, including those regulated by the IRC:

1. All roof penetrations, excluding attic ventilation, shall be located a minimum of six feet from valley centerline and four feet from the exterior wall line measured on a horizontal plane.
2. Type B gas vents may penetrate the eave ice barrier if installed within a wood framed, R-21 insulated curb, minimum 24 inches tall as measured on the ridge side of the roof. The ice barrier shall extend up the curb a minimum of 12 inches on all sides. See AMC 23.85.R903.1 for detail.

23.110.303.3 Prohibited locations.

Delete exceptions 3 and 4. Unvented room heaters are not allowed.

23.110.303.4.1 Protection from vehicle impact damage.

Add the following section:

303.4.1 Appliances subject to vehicle impact. Appliances, including their associated piping and ductwork, subject to vehicle impact shall be protected by one or more of the following methods:

1. Install the appliance on a platform a minimum of 24 inches high. The appliance shall not extend beyond the face of the platform. Piping and ductwork shall not be surface mounted to the platform in a location subject to vehicle impact.
2. Protect the appliance with a barrier. The barrier shall be a minimum of 30 inches high and be constructed of a minimum 2-inch diameter schedule 40 steel pipe. The barrier must have a minimum 6-inch setback from the platform or appliance. The maximum unprotected distance shall not exceed 5-feet. The barrier shall be installed per one of the following methods:
 - a. Buried a minimum of 24 inches deep in compacted soil and imbedded in concrete slab.

- b. Set in a minimum 12-inch by 12-inch square by 12-inch deep block of concrete (slab not included).
 - c. Secured to the wood framed garage floor with flange and stainless steel bolts and imbedded in concrete slab.
 - d. Secured to the concrete slab using a floor flange with a minimum of four $\frac{3}{8}$ inch diameter by $3\frac{1}{2}$ inch long galvanized or stainless anchor bolts.
3. Mount appliance and associated piping and ductwork to wall and/or suspend from the ceiling in a location clear of any potential vehicle interference.

In all cases the minimum clear width and depth of the garage shall be maintained in accordance with Title 21.

23.110.303.8 Liquefied petroleum gas facilities.

Add the following section:

303.8 Liquefied petroleum gas facilities. Liquefied petroleum gas facilities shall not be located in any pit, basement, crawlspace, under show windows, or interior stairways, in engine, boiler, heater, or electric meter rooms. LPG facilities include tanks, containers, container valves, regulating equipment, meters, and/or appurtenances for the storage and supply of LPG for any building structure or premises.

303.8.1 Liquefied petroleum gas piping. Liquefied petroleum gas piping shall not serve any appliance located in a pit or basement where heavier than air gas might collect to form a flammable mixture.

23.110.304.6 Outdoor combustion air.

Delete Figure 304.6.1(1).

Delete Figure 304.6.1(2).

Delete Alternate Opening Location in Figure 304.6.2.

23.110.304.8.1 Cold climate alternate requirements for combustion and ventilation air.

Amend section 304.8 by adding the following subsection:

Section 304.8.1 Cold climate alternate requirements for combustion and ventilation air.

304.8.1.1 Purpose. The purpose of this section is to provide alternate methods of designing combustion air and ventilation air systems for fuel burning appliances in cold climate regions. Only persons registered to practice engineering in the applicable jurisdiction will be permitted to use these alternate design methods.

304.8.1.2 Scope. The requirements of this section apply to all fuel gas burning appliances.

Exception: Direct vent appliances, listed cooking appliances, appliances having separated combustion system, enclosed furnaces, refrigerators and domestic clothes dryers.

304.8.1.3 Definitions. Certain words and terms used in this section shall have meanings as listed. The below-listed definitions shall apply to this section only, even though they may differ with broader definitions found elsewhere in the code.

Free area is the net actual open area of a louver, screen, duct, or intake grille.

Ventilation air is air required for cooling of the appliance enclosure to maintain temperatures required for proper equipment operation.

304.8.1.4 General.

304.8.1.4.1 Air supply. Fuel-burning equipment shall be provided with a sufficient supply of combustion and ventilation air.

304.8.1.4.1.1 Enclosures containing fuel burning appliances. Enclosures shall be provided with minimum unobstructed combustion air openings as specified in section 304.8.1.9 and arranged as specified in sections 304.8.1.5 and 304.8.1.6, and ventilation air systems shall be as specified in section 304.8.1.10.

304.8.1.4.1.2 Existing buildings. When fuel-burning appliances are installed in an existing building containing other fuel-burning equipment, the enclosure shall be provided with sufficient combustion and ventilation air for all fuel-burning equipment contained therein as specified in sections 304.8.1.9 and 304.8.1.10.

304.8.1.5 Combustion air openings.

304.8.1.5.1 Location. The combustion air opening(s) may be located anywhere in the enclosure provided there is an unobstructed area extended to the fire box that does not increase the total combustion air system static pressure requirements.

304.8.1.5.2 Dampers prohibited. Combustion air openings shall not be installed so as to open into construction where fire dampers are required. Volume dampers shall not be installed in combustion air openings.

Exception: Dampers electrically interlocked with the firing cycle of the appliance, so as to prevent operation of the appliance when the dampers are not proven open.

304.8.1.5.3 Screening. Combustion air openings shall be covered with corrosion-resistant screen of ½ inch mesh.

Exception: Combustion air openings serving a nonresidential portion of a building may be covered with a screen having

openings larger than ½ inch but in no case larger than one inch.

304.8.1.6 Sources of combustion and ventilation air.

304.8.1.6.1 Air from outside. Combustion and ventilation air obtained from outside the building shall be supplied as follows:

1. Through permanent openings of the required area directly to the outside of the building through the floor, roof, or walls of the appliance enclosure; or
2. Through continuous ducts of the required cross-sectional area extending from the appliance enclosure to the outside of the building.

304.8.1.6.2 Interior spaces. Large indoor areas may be used for combustion and/or ventilation air if sufficient infiltration or other outside air supply is available by nature of the building construction, system design, or building use.

304.8.1.6.3 Prohibited sources. Openings and ducts shall not connect appliance enclosures with space where the operation of a fan may adversely affect the flow of combustion air. Combustion and ventilation air shall not be obtained from a hazardous location or from any area in which objectionable quantities of flammable vapor, lint or dust are given off. Combustion and ventilation air shall not be taken from a machinery room.

304.8.1.7 Combustion and ventilation air ducts.

304.8.1.7.1 General. Combustion and ventilation air ducts shall:

1. Be of galvanized steel complying with IMC Chapter 6 or equivalent corrosion-resistant material approved for this use.
2. Have a minimum cross-sectional dimension of 3 inches.
3. Serve a single appliance enclosure.

304.8.1.7.2 Dampers. Combustion air ducts shall not be installed so as to pass through construction where fire dampers are required, unless properly enclosed in a rated shaft. Volume dampers shall not be installed in combustion air ducts.

Exception: Motor operated dampers interlocked with appliance controls to open damper prior to firing appliance are permitted, if damper blade actuated end switches are provided to prevent appliance operation should dampers fail to open.

304.8.1.8 Special conditions created by mechanical exhausting or fireplaces. Operation of exhaust fans, kitchen ventilation systems, clothes dryers or fireplaces shall be considered in determining combustion and ventilation air requirements to avoid unsatisfactory operation of installed fuel burning appliances.

304.8.1.9 Area of combustion air openings.

304.8.1.9.1 General. The free area of openings, ducts or plenums, screens and louvers supplying combustion air to enclosures containing fuel-burning appliances shall be as required: The opening(s) shall communicate directly or by means of ducts with outdoors or to such spaces (crawl space) freely communicating with outdoors and shall be sized in accordance with Table No. 304.8.1.1.

304.8.1.10 Ventilation air.

304.8.1.10.1 General. In addition to the combustion air required, sufficient ventilation shall be supplied for proper operation of equipment. Ventilation system shall be designed to maintain positive or atmospheric pressures within the enclosure. If exhaust fans are provided, a mechanical make-up air fan shall be installed to make-up exhausted air. Natural or gravity make-up air is not allowed.

1. **Table No. 304.8.1.1 - Combustion Air System Design Criteria**

Fuels	System Static Pressure Limits ¹		Combustion Air Requirements	
	Atmospheric		Forced Draft	All Types
	Draft Hoods	Baro-metric Dampers		
GAS (Natural, Propane, Butane)	0.02" WG	0.02" WG	0.05" WG	24 CFM 100,000 BTUH

Note 1: Static pressure values represent maximum static pressure losses across all components of the combustion air system including screens, louvers, ducts and fittings.

Note 2: For enclosures containing both atmospheric and forced draft appliances, the most restrictive design requirements shall apply.
PER ASHRAE 1993 FUNDAMENTALS HANDBOOK CHAPTER 15 TABLE 11 (Pg 15.10) 1 cu. ft. natural gas requires 9.6 cu. ft. air.
Convert to cubic feet of air per 1,000 Btu input assuming 1,000 Btu per cubic foot of gas:

GAS:	9.6 cu. ft. air 1 cu. ft. gas	X	1 cu. ft. gas 1,000 Btu	=	9.6 cu. ft. air/1,000 Btu (14.4 @ 50% excess)
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* Air at 2,000 feet above sea level. Installations above this shall de-rate appliance output 4% per 1,000 feet.

EXAMPLE: Natural gas rated at 1,000 Btuh per cubic foot.

Combustion air flow rate:

16 CFM per 100,000 Btuh input for stoichiometric combustion.

24 CFM per 100,000 Btuh input for 50% excess air.

23.110.304.10 Louvers and grilles.

Replace "not smaller than ¼ inch" with "of ½ inch for residential and ½ inch up to one inch for commercial applications".

23.110.304.11 Combustion air ducts.

Delete the exception to Item 1.

Replace Item 5 with the following:

Combustion air shall not be obtained from an attic.,

Add an exception to item #6 as follows:

Exception: This requirement does not preclude installation of a cold trap (upturned elbow). The installation shall maintain the free area of the combustion air duct.

Replace in item 8 the words "from the adjoining finished ground level" with "above the anticipated snow depth".

23.110.304.13 LPG systems.

Add Section as follows:

304.13 LPG systems. Appliances using LPG shall have two (2) combustion air openings. The lower opening shall be at floor level or below and shall be sloped down toward the exterior. These systems shall be continuously ducted to outside the building. Use of under-floor areas for supply of combustion air to LPG burning appliances is prohibited.

23.110.305.3 Elevation of ignition source.

Amend section 305.3 by adding the following to the end of the paragraph: Rooms and spaces that are not part of the living space of a dwelling unit shall include but are not limited to utility, storage, mud, laundry, toilet and bathing rooms.

Group F, M and S occupancies with open spaces less than 5,000 square feet that include overhead doors providing access to vehicles and equipment containing combustible fuel shall comply with this section.

Communicating spaces separated by a door are not considered part of this space.

Delete the exception to 305.3.

23.110.305.11 Installation in aircraft hangars.

Replace Section 305.11 with the following:

305.11 Installation in aircraft hangars. Overhead appliances installed in aircraft storage areas shall be located at least 10-feet vertically above the upper surface of the wings or engine enclosures of the tallest aircraft which may be housed in the hangar.

Exception: Where a 10-foot vertical separation cannot be maintained in an NFPA 409 Class III hangar, a sealed combustion appliance may be used. The appliance shall be located as high and as far away from the wings and engine enclosure as possible. This exception shall not apply to NFPA 409 Class I and II hangars.

23.110.306.4 Appliances under floors.

Amend by adding the following as the first sentence:

Installation of appliances in under-floor crawlspaces is prohibited unless prior written approval is obtained from the administrative authority.

Add an exception to the amendment as follows:

3. Direct vent appliances may be installed as long as no water or sign of water is present and the installation is in accordance with IFGC 305.7.

23.110.306.5 Equipment and appliances on roofs or elevated structures.

Add the following sentence to the end of the first paragraph:

An exterior means of access may only be used for heights 20 feet or less above grade.

At the end of design criteria #2, add the following sentence:

The bottom rung of the ladder shall be located within 14 inches of the floor or grade.

23.110.306.6 Guards.

Replace the exception with the following:

Exception: Guards are not required where allowed by IBC 1015.6 or 1015.7.

23.110.306.7 Mezzanines and platforms.

Add a new section as follows:

306.7 Mezzanines and platforms. Every mezzanine or platform more than 10-feet 6-inches above the ground or floor level shall be made accessible by a stairway or ladder fastened to the structure. The ladder shall be constructed in compliance with the provisions of Section 306.5.

23.110.307.2 Fuel burning appliances.

Replace "collected" with "piped through a factory-built condensate neutralizer sized and approved for the use".

Add a sentence at the end of the first sentence as follows:

Neutralized wastewater PH levels shall be elevated to a minimum PH of 7.

23.110.307.6 Condensate Pumps.

Add the following exception:

Exception: Residential installations.

23.110.310.4 Electrical bonding.

Add the following section:

310.4 Electrical bonding. Bonding to the electrical service grounding electrode system shall be in accordance with NEC 250.104(B).

23.110.403.9.1 Pipe joints.

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

All joints in underground ferrous piping shall be welded when any of the following conditions apply:

1. The nominal pipe diameter is 2½ inches or larger.
2. The pipe is installed under a driveway.
3. The gas pressure is 2 psig or greater.

23.110.403.9.2 Copper tubing joints.

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

All joints in underground copper shall be brazed with wrought copper fittings. No underground joints shall be permitted unless the underground length of run exceeds 60 feet. All pipe to tubing transitions shall be made above ground.

23.110.403.9.5 Metallic fittings.

Amend Item 2 by deleting the words "or cast iron."

Delete Item 5.

Add a new Item 10 as follows:

10. Right and left nipple couplings. Where unions are necessary, right and left nipples and couplings shall be used. Ground joint unions may be used at exposed fixture, appliance, or equipment connections and in exposed exterior locations immediately on the discharge side of a building shutoff valve.

23.110.404.9 Above-ground outdoor piping.

Amend by replacing 3½ inches with 5½ inches (in 2 locations).

23.110.404.12 Minimum burial depth.

Delete the wording "except as provided for in Section 404.12.1".

Add the following to the end of the paragraph:

Plastic and copper gas piping shall have at least 18 inches of earth cover, or other equivalent protection. Provide a minimum radial separation of 12

inches between direct burial piping systems and utility, electrical cables and conductors, communication cables and ground rods.
Delete subsection 404.12.1.

23.110.404.21 Ground penetrations.

Add Section 404.21 as follows:

404.21 Ground penetrations. At all points where fuel gas piping enters or leaves the ground, there shall be installed, above ground, an approved or listed fuel gas piping connector, capable of absorbing a 6-inch displacement, in any direction, due to frost heave action. If the fuel gas riser is itself flexible, room for absorbing a 6-inch displacement must installed in lieu of using a connector for such means.

23.110.404.22 Fuel gas piping connectors.

Add Section 404.22 as follows:

404.22 Fuel gas piping connections. Fuel gas piping connectors listed for outdoor use may be used between the meter and house main. No flex connector may pass through any wall, partition, panel or other barrier. Solid fittings shall be used on each end.

23.110.404.23 Frost heave protection for copper tubing.

Add Section 404.23 as follows:

404.23 Frost heave protection for copper tubing. Copper tubing ground penetrations shall be protected from frost heave by incorporation of a suitable above ground 6-inch radius loop or a listed fuel gas piping connector of equal size.

23.110.404.24 Frost heave protection for above grade piping.

Add Section 404.24 as follows:

404.24 Frost heave protection for above grade piping. Above grade exterior piping routed between separate structures or between a structure and an exterior appliance installed on grade shall have an approved or listed fuel gas piping connector, capable of absorbing a 6-inch displacement in any direction at each structure and each exterior appliance.

23.110.406.4.1 Test pressure.

Replace "1½" with "10".

Replace the minimum test pressure of 3 psig with 10 psig.

Add the following to the end of the paragraph:

Required pressure tests of 10 psig shall be performed with gauges of 0.2 psi increments or less. Welded pipe shall be tested with not less than 60 psig test pressures.

23.110.406.8 Temporary gas provisions.

Add Section 406.8 as follows:

406.8 Temporary gas provisions. Temporary gas installations shall comply with sections 406.8.1 and 406.8.2.

406.8.1 Permit required.

- A. Temporary gas approval is given to allow "comfort heating" appliances to be used to provide temporary heat to a building or building site prior to the completion of the building's primary heating system.
- B. The most commonly used appliance is a portable natural gas space heater. Other comfort heat appliances allowed for temporary heat purposes are warm air furnaces, boilers, and unit heaters. It is NOT the policy of the Building Safety Division or Enstar Natural Gas Company to allow "decorative fireplaces" or "ranges" to be utilized as temporary heat for buildings. These appliances are not designed or "listed" for such purpose.
- C. All appliances used to provide temporary heat for buildings shall be installed in accordance with the manufacturers' instructions and terms of their listing, with particular attention being paid to the clearances to combustibles from the top, bottom, front, back, and sides of these appliances.
- D. Unit heaters used for temporary heat shall be installed per manufacturer's instructions and listed clearances to combustibles from the top, bottom, front, back, and sides of these appliances. The vent connector shall be graded at $\frac{1}{4}$ inch per foot slope upward to the outside and it shall be changed to "B" vent at the wall penetration. The "B" vent must maintain its listed clearance to combustibles, extend a minimum of 5 feet vertically, and be secured.
- E. Furnaces used for temporary heat shall comply with the same requirements as for unit heaters as stated above. In addition, the return air for the furnace shall be ducted a minimum of 10 feet from the furnace.
- F. Portable space heaters shall be provided with 100 percent outside air to the back end of the heater. In most cases, the gas regulator attached to these heaters shall be piped to the outside. The regulator vent shall not discharge into the space being heated.
- G. Gas hose used for temporary heaters shall be a type approved by the Building Safety Division and all manufacturers' listed clearances shall be maintained. The hose shall have an internal wire mesh or braid and be "kink

proof". Supporting wire shall run the full length of the hose.
Each time a hose is moved from one lot to another, it shall be
tested with 60 psig air pressure.

406.8.2 Temporary gas installations - permit not required.

A permit and inspection shall not be required for residential temporary construction heat serving tented footings and foundations. This provision is for thawing ground and curing concrete, not comfort heat for workers, such as plumbers installing underground. This allowance is limited to portable 'SURE FLAME' type heaters and not intended for unit heaters, furnaces, and boilers with special venting considerations. All heaters and hoses shall be of the approved type. Heaters shall be listed by an approved listing agency. All hoses shall have an internal wire mesh or braid and be "kink proof". Supporting wire shall run the full length of the hose. One hundred percent (100%) outside air shall be provided to heater at all times. Listed clearances to combustibles shall be maintained. A licensed journeyman plumber or gasfitter shall perform all work.

23.110.410.6 Regulator protection.

Add section as follows:

23.110.410.6 Regulator protection. When the manufacturer's instructions don't specify an installation elevation for the gas regulator, the regulator shall be installed 12 inches above the anticipated snow depth to protect the regulator from snow and ice buildup.

23.110.411.1 Connecting appliances.

Amend item 1 as follows:

2. Rigid metallic pipe and fittings, excluding hanging appliances not otherwise restrained against lateral movement.

23.110.411.2 Manufactured home connections.

Add the following to the end of the section:

Pounds to inches water column regulators serving mobile homes and connected to piping shall be attached to the exterior of the mobile home and shall not be located under the mobile home.

23.110.417 Medium pressure gas.

Add Section as follows:

417 Medium pressure gas.

417.1 Medium pressure gas. The installation of a medium pressure gas system (2 psig or 5 psig) within a building must be pre-approved by the local gas utility. Steel pipe connections shall be welded or press-connect fittings listed to ANSI LC-4/CSA 6.32 in accordance with IFGC

403.9. Test pressure for all medium pressure gas piping shall be 60 psig.

Exception: Medium pressure gas piping within mechanical rooms housing the equipment being served may be threaded in accordance with IFGC 403.9. Threaded piping shall not be concealed within construction.

417.2 CSST medium pressure gas. The installation of a CSST medium pressure gas system (2 psig or 5 psig) within a building must be pre-approved by the local gas utility. Test pressure for all medium pressure gas piping shall be 60 psig. Joints shall be limited to the meter connection and at the regulator to the appliance being served. Intermediate joints are not allowed without prior approval.

23.110.501.8 Appliances not required to be vented.

Delete Items 8 and Item 10.

23.110.502.8 Enclosure required.

Add Section as follows:

502.8 Enclosure required. Venting systems installed outside the building thermal envelope shall be enclosed in an insulated (R-19 minimum) chase. The portion of the vent system above the last roof and its projected plane need not be enclosed. The portion of the venting system passing through an attic space need not be insulated or enclosed.

23.110.502.9 Vent terminals – ice and snow protection.

Add Section as follows:

502.9 Vent terminals – ice and snow protection. Vent terminations penetrating any metal roof or an asphalt shingle roof exceeding an 8/12 pitch shall be protected by an approved type of snow retention or diversion device.

23.110.503.3.6 Above ceiling air handling spaces.

Add the following to the end of the section 503.3.6:

The vent material shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM E84.

23.110.503.5.5 Size of chimneys.

Item 2: Delete the phrase ", nor greater than seven times the draft hood outlet area" at the end of the sentence.

Item 3: Delete the phrase ", nor greater than seven times the smallest draft hood outlet area" at the end of the sentence.

Add the following to the end of the section:

In no case shall the gas vent be sized more than one size larger than the minimum size required by the appliance sizing tables referenced in this code or the manufacturer's installation instructions.

23.110.503.6.10.1 Category I appliances.

Item 2: Delete the phrase ", nor greater than seven times the draft hood outlet area" at the end of the sentence.

Item 3: Delete the phrase ", nor greater than seven times the smaller draft hood outlet area" at the end of the sentence.

Add the following to the end of the section:

In no case shall the gas vent be sized more than one size larger than the minimum size required by the appliance sizing tables referenced in this code or the manufacturer's installation instructions.

23.110.503.7.9 Size of single-wall metal pipe.

Item 2: Delete the last sentence.

Add the following to the end of the section:

In no case shall the gas vent be sized more than one size larger than the minimum size required by the appliance sizing tables referenced in this code or the manufacturer's installation instructions.

23.110.Table 503.8 Through-the-wall vent terminal clearance.

Replace the Clearance Location in row A of Table 503.8 with the following:
Clearance above anticipated snow depth at finished grade level, veranda, porch, deck, or balcony

23.110.503.10.4.2 Common vents for multiple appliances.

Add Section as follows:

503.10.4.2 Common vents for multiple appliances. When venting 3 or more Category I appliances, the common vent shall be a minimum Type "B" double wall.

23.110.Table 504.2(3) Masonry chimney.

At the bottom of Table 504.2(3), delete the category "maximum internal area of chimney (square inches)" and the wording "seven times the listed appliance categorized vent area, flue collar area, or draft hood outlet area".

23.110.Table 504.2(4) Masonry chimney.

At the bottom of Table 504.2(4), delete the category "maximum internal area of chimney (square inches)" and the wording "seven times the listed appliance categorized vent area, flue collar area, or draft hood outlet area".

23.110.504.2.9 Chimney and vent locations.

Change R8 to R19 in last sentence of paragraph.

23.110.504.3.20 Chimney and vent locations.

Change R8 to R19 in last sentence of the first paragraph.

23.110.505.1.1 Commercial cooking appliances vented by exhaust hoods.

Add the following to the end of the last sentence: "unless part of the listed system."

23.110.614.9.2 Duct Installation.

Delete the words "more than 1/8 inch (3.2mm)".

23.110.614.9.5 Length identification.

Add after "equivalent length exceeds 35 feet" the following:

"or is concealed from visual inspection"

Add to the end of the paragraph:

"and shall be laminated or in a moisture-resistant sleeve secured to the wall using screw, staples, or thumb tacks. Push pins will not be accepted."

23.110.618.3 Prohibited sources.

Revise the first sentence to read:

Outdoor, return, or transfer air for forced-air heating and cooling systems shall not be taken from the following locations:

Revise item #7 to simply read "Crawl space".

23.110.618.4 Screen.

Change 1/4 to 1/2 in both places.

23.110.621 Unvented room heaters.

Delete section 621. Unvented room heaters are not allowed.

23.110.623.8 Ventilating hoods.

Add Section as follows:

623.8 Ventilating hoods. Ventilating hoods shall be installed over all domestic free standing or built-in ranges, unless the range is otherwise listed for forced down draft ventilation. The hood or ventilation system shall exhaust to exterior of the building.

23.110.629.2 Small ceramic kiln ventilation.

Add Section as follows:

629.2 Small ceramic kiln ventilation. A canopy-type hood shall be installed directly above each kiln. The face opening area of the hood shall be equal to or greater than the top horizontal surface area of the kiln. The hood shall be constructed of not less than 0.024-inch (No. 24 U.S. gauge) galvanized steel or equivalent and be supported at a height of between 12 inches and 30 inches above the kiln by noncombustible supports. Each hood shall be connected to a gravity ventilation duct extending in a vertical direction to outside the building. This duct shall be of the same construction as the hood and shall have a minimum cross-sectional area of not less than one-fifteenth of the face opening area of the hood. The duct shall terminate a minimum of 12 inches above any portion of a building within 4 feet and terminate no less than 4 feet from any openable windows or other openings into the building or adjacent property line. The duct opening to the outside shall be shielded, without reduction of duct area, to prevent entrance of rain into the duct. The duct shall be supported at each section by noncombustible supports. Provisions shall be made for air to enter the room in which a kiln is installed at a rate at least equal to the air being removed through the kiln hood.

23.110.630.3 Combustion and ventilation air.

Delete section 630.3.

23.110. Appendices.

Adopt Appendices as listed in AMC 23.05.010. Local amendments to appendices as follows, if applicable.

Section 15. This ordinance shall become effective thirty (30) days after its passage.

PASSED AND APPROVED by the Anchorage Assembly this 14th day of April, 2026.



Chair

ATTEST:



Municipal Clerk



MUNICIPALITY OF ANCHORAGE

Assembly Memorandum

AM No. 152-2026

Meeting Date: March 3, 2026

1 **FROM: MAYOR**

2
3 **SUBJECT: AN ORDINANCE REPEALING ANCHORAGE MUNICIPAL CODE**
4 **CHAPTER 10.75 INSPECTION FEES; REPEALING AND**
5 **REENACTING ANCHORAGE MUNICIPAL CODE CHAPTERS**
6 **23.05 BUILDING REGULATIONS, 23.10 ANCHORAGE**
7 **ADMINISTRATIVE CODE, 23.15 INTERNATIONAL BUILDING**
8 **CODE, 23.20 INTERNATIONAL MECHANICAL CODE, 23.25**
9 **UNIFORM PLUMBING CODE, 23.30 NATIONAL ELECTRICAL**
10 **CODE, 23.45 INTERNATIONAL FIRE CODE, 23.60**
11 **INTERNATIONAL ENERGY CONSERVATION CODE, 23.65**
12 **INTERNATIONAL EXISTING BUILDING CODE, 23.75 ASME**
13 **A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS,**
14 **23.76 ASME A18.1 SAFETY STANDARD FOR PLATFORM LIFTS**
15 **AND STAIRWAY CHAIRLIFTS, 23.85 INTERNATIONAL**
16 **RESIDENTIAL CODE, and 23.110 INTERNATIONAL FUEL GAS**
17 **CODE.**

18
19 This ordinance repeals existing editions of the various building codes and local
20 amendments and adopts new codes and revised locals amendments. The new
21 codes and proposed amendments were reviewed and recommended by the
22 Anchorage Building Board of Examiners and Appeals after nine committees,
23 comprised of more than 100 private sector and Municipality of Anchorage staff
24 professionals reviewed the codes and made recommendations (Exhibit A). The
25 code committee review process began in January of 2025 and continued to the fall
26 of 2025 and all meetings were open to public input. A summary of significant
27 changes is provided in Exhibit B and a Summary of Economic Effects is provided
28 in Exhibit C.

29
30 Following the work of the committees, the Building Board of Examiners and
31 Appeals held two public meetings on the proposed new codes. Through both these
32 meetings, all the cords were approved for adoption by the Assembly.

33
34 Proposed amendment to Chapter 23.15.420 (i.e. 420.12 Single Exit Buildings with
35 Group R-2 Occupancies.) is less restrictive than the state and will require state
36 approval for the code modification prior to it being legally permissible. An
37 application with the state has been submitted along with the letter of explanation
38 provided in Exhibit D.

39
40
41
42 **THE ADMINISTRATION RECOMMENDS APPROVAL.**

1
2 Prepared by: Daniel King, P.E., Engineering Services Manager,
3 Development Services
4 Approved by: Greg Soule, Director/Building Official, Development
5 Services
6 Concur: Bob Doehl, Executive Director, Community
7 Development
8 Concur: Ona R. Brause, Director, OMB
9 Concur: Eva R. Gardner, Municipal Attorney
10 Concur: William D. Falsey, Chief Administrative Officer
11 Concur: Rebecca A. Windt Pearson, Municipal Manager
12 Respectfully submitted: Suzanne LaFrance, Mayor

Exhibit A
Code Review Committees

2024 IBC/IEBC Nonstructural	2024 IBC/IEBC Structural	2024 IRC	2024 IMC/IFGC	2024 UPC
Bryce Hamels, co-chair Chad Burgess Daniel Clift Daniel King David Abuobaid Diane Heaney-Mead Don Crafts, co-chair John McCool Lily York Mark Panilo Mike May Phillip Calhoun Rodney Wehr Ron Thompson Ross Noffsinger Sam Combs Sean Carlson	Alissa Engelby Bill Peterson Brad Gilgus Daniel Folmar Daniel King David Stierwalt Everet Megli, co-chair Grant Gephardt, co-chair John Oldfield Joseph Lawendowski Mike May Nelson Franklin Robert Limstrom Sean Baginski	Andre Spinelli, co-chair Anna Lee Chad Burgess Chris Schutte Daniel King David Menesis Eric Visser Heath Kalhstrom Joseph Lawendowski Mike May Nelson Franklin Rodney Wehr Shawn Holdridge Stacy (Carpenter) Raygor Tom Green Wayne Bolen, co-chair	Adam Sandefur Alec C Thomson Craig Fredeen Daniel King Dave Bathke Jason Fernandes Jenwei "Charlie" Chien Jimmy Jaworski John "Jack" Johnson Keith Soboleski, co-chair Leigh Bergstrom Niklas Jackson, co-chair Phil Berg Randy Golding Ron Thompson Yars Dovba	AJ Schirack Alec C Thomson Craig Fredeen Daniel King David Bathke Evan Mathers James Jaworski Jason Fernandes Jenwei (Charlie) Chien John "Jack" Johnson Larry Embley Leigh Bergstrom Mike Divens Nick Jackson Ron Thompson Tony Jones Tracy McKeon, co-chair Yars Dovba, co-chair
2024 IFC	2023 NEC	ASME A17.1/A18.1	2024 IECC	
Bart Meinhardt, co-chair Brian Dean Christine Ness Dee Nichols Jason Arnold, co-chair Jeff Bouton John Malone Maggie Bardauskas Mark Frischkorn Mark Panilo Nicole Thomson Ross Noffsinger Sean Carlson Thomas Faulkenberry Todd Heesch Tyler Kosednar	Brad Jackson Brian Humphrey Dan Vannoy David Abuobaid Eric Cowling, co-chair Eric Widman Gary Momosor Ken Ratcliffe Kyle Lacy Mark Panilo Mike Green Nathaniel Holland Oliver Burbridge Preston McKee Roger Weese Thomas Allen Victor Fosberg, co-chair	Amberle Wright Ben Noyles Ben Swann Brice Burnett Clay Hotchkiss David Abuobaid Eric Cowling, co-chair Kelly Welton, co-chair Kevin Bennett Mark Panilo Sean Carlson Sierra Stonich Victor Fosberg	Adam Wilson Bryce Hamel Chad Burgess Christopher Schutte Daniel Clift Daniel King, co-chair David Bell David Nicolai Donald Crafts Eric Cowling Jenwei "Charlie" Chien Jeremy Maxie Kendall Wilson Leigh Bergstrom Lily York Michael Liebner Ross Noffsinger Sean Carlson Shawn Holdridge	

Significant Changes

23.05 – Building Regulations

010. Adoption of codes. Code language is clarified to identify when codes are adopted by reference with local amendments (like the International Building Code which comes out with an edition every three years) and when they are written and adopted in full (like the Anchorage Administrative Code which is written in full by the department).

23.10 – Anchorage Administrative Code

103.4.4. Members, voting, and hearings before the building board. Building board makeup has been modified. General contractors on the board will move from four to two while additional members will move from two to four. This will allow other disciplines to bring in junior members to be on the board without the weight of being the only knowledgeable member on the board. The additional members was also expanded to include optional representation by fire protection engineer or contractor or an elevator contractor. Previously, there was not an option to have them on the board. While these disciplines are more difficult to fill for a regular seat, their expertise would be welcome when they are available to join.

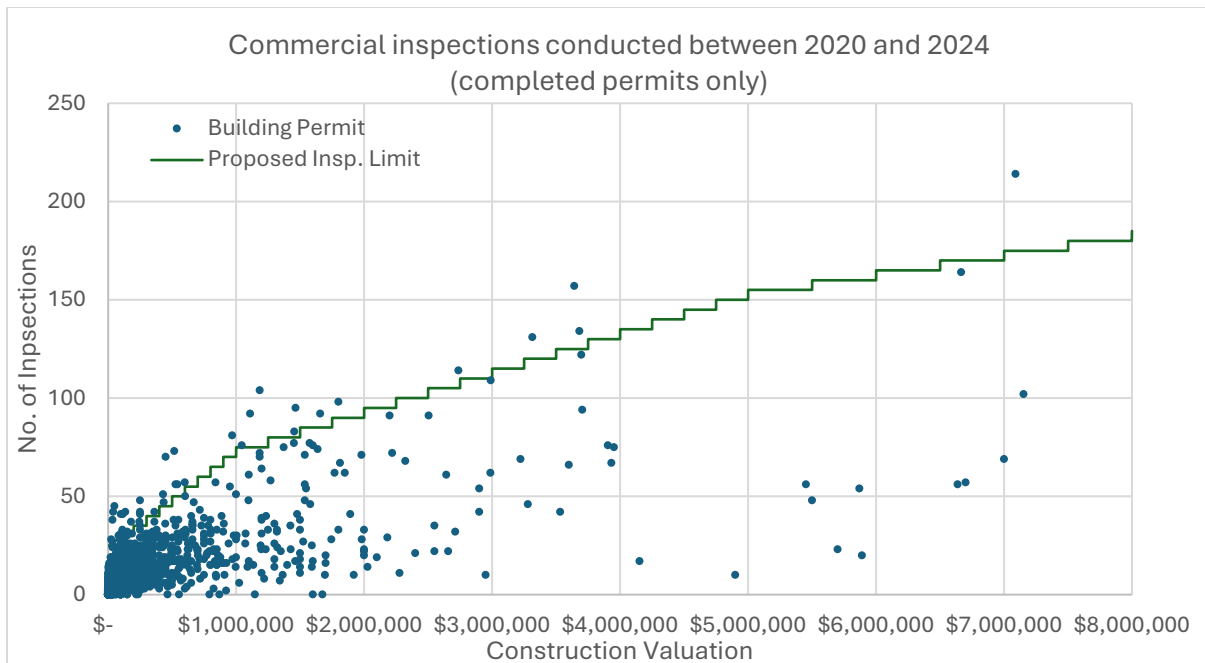
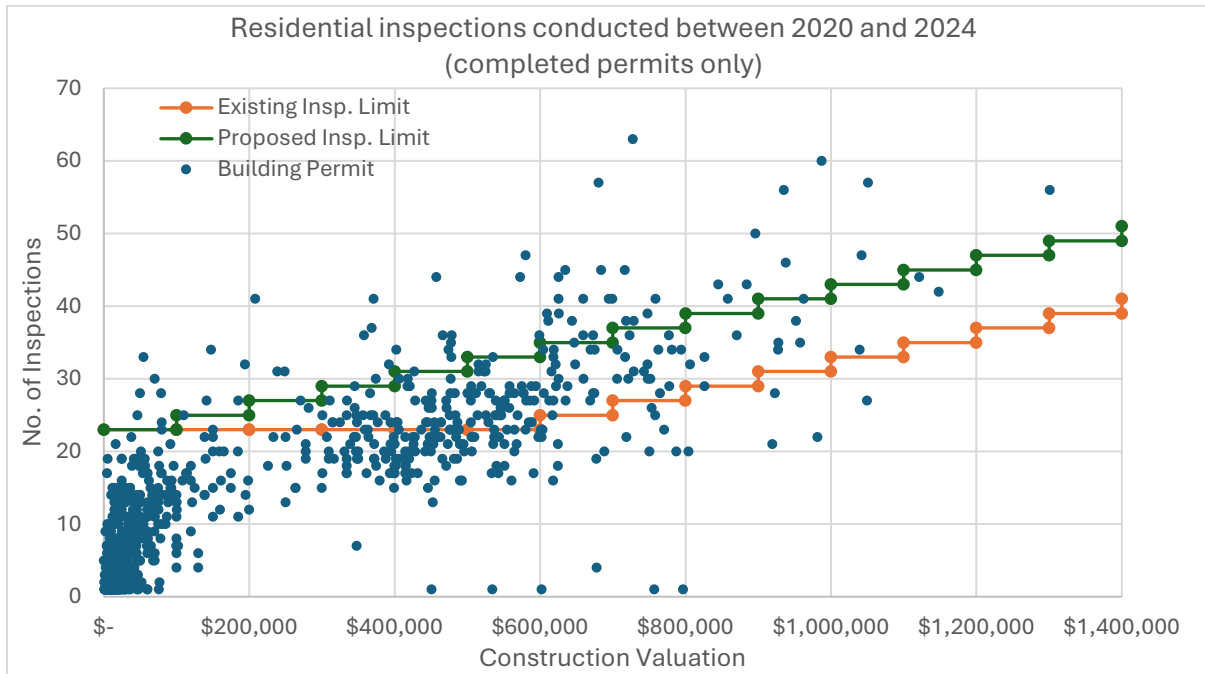
104.2.1. Building permit exemptions. The exemption for non structural repair has been extended from \$5,000 to \$10,000. The value has been set at \$5,000 since at least the 2003 adoption of the Anchorage Administrative Code. Controlling for inflation, this comes out close to \$10,000. This will cover repair of gypsum wall board, exterior siding, and smaller roofing projects that do not require structural modifications.

104.15. Mobile food units. and 104.16. Shelter units located in allowed camps. Both these items in the previous iteration of the code were listed as exempt from building permit, however the language further in clarifies they would still be required to seek an electrical permit which has been used to enforce the zoning code along with fire and traffic requirements specifically listed in these sections of code. The language has changed to clarify the intent, which is reduced building plan review and inspection, but this will still come in as a building permit. This will clear up confusion with applicants.

109. Fines and fees tables. Residential permits for single family and duplex construction were separated out from commercial permits in 2011; they were assigned a limited number of inspections associated with the residential permit and any additional inspections needed were charged on a “per inspection basis.” The updated fee tables will add a similar limitation to commercial projects now. Putting this limitation on commercial permits’ included inspections will allow us to extend the number of inspections we can offer on residential permits further so there will be less surprise fees associated with residential permits. This also allows us to double the number of inspections offered on retrofit permits for equipment placement; previously, re-inspections would double the cost of a retrofit permit, but now contractors will be able to make corrections without paying additional fees, receiving two inspections for the cost of one.

Additionally, this has allowed the fee table to combine the modifier for commercial projects up to one million dollars in valuation, effectively providing a discount for smaller work valued at five hundred thousand or less.

In reviewing commercial permits completed between 2020 and 2024, with the proposed quantity of inspections, 1% of permits valued at a million dollars or less would go over; and only 8% of permits valued between one million and five million dollars would go over. The proposed change over the same period for residential permits, the old inspection limits led to 20% of permits going over; the proposed increased inspections limit would drop this to 6% of residential permits going over.



A reduced fee has been established for smaller scope projects valued at under \$50,000. This includes a reduced building safety (inspection) fee which gets limited inspections for minor alterations, repairs, and decks as well as a 50% reduced plan review fee for repairs. This is to account for projects like reroofs where damaged structural framing is encountered, and the project has to become an alteration permit to repair the framing. The work for inspectors on such projects is usually limited and the plan review is typically like-for-like replacement making reviews simpler. This is an effort to make maintaining structures more affordable while still capturing the required work of the department.

Fees associated with inspections for site work have been clarified. Previous code cycles, if there was a building permit, no additional fee was required for sitework inspections. However, occasionally, very small buildings will be designed where the valuation is low, but there is a lot of sitework involved. To capture these projects, we've clarified that an additional fee applies to fill and grade work for inspections for commercial building permits. Plan review will still occur for building permits with fill and grade scope without an additional fee for the fill and grade review.

23.15 – International Building Code

420.12. Single exit buildings with group R-2 occupancies. Current code limits the number of occupants on a floor to the number of exits provided; for instance, a single-story office building can have up to 49 occupants with a single exit, while a second story would be limited to only 29 occupants with a single exit. This is due to the increased risk with getting people safely out of a building during an emergency such as a fire. There has been interest, both locally and nationally, in extending this occupant limit for multi-family construction. Currently, the building code allows multi-family structures with maximum 4 dwelling units per floor to be built up to three stories above the exterior grade. This amendment, vetted both in the building code and fire code committee, will extend this up to a maximum of six stories, putting additional requirements on the initial construction. The Anchorage Fire Department was consulted on this amendment to determine a reasonable limitation that would still allow adequate access for fire personnel.

This exception would only apply within the Building Safety Service Area (not Eagle River, Girdwood, Chugiak, etc.) since it is under the deferred jurisdiction of the Municipality of Anchorage and is served by a Class 1 rated fire department.

This amendment is currently under review by the State Fire Marshal office. The department is awaiting response.

1608.4. Flat roof snow loads. The code has historically listed a minimum roof snow load for design purposes. With the adoption of this edition of the IBC, the code has updated the snow load data based on research completed by the University of Alaska Anchorage. This research effectively removes the need for a minimum snow load to be required, since the code now reflects the latest data. In most cases, the historic minimum will be met; and in specific instances, such as low risk storage structures, a reduced snow load can be used safely.

2303.4.6.1. Modification to TPI 1. With the historic snow falls received in Anchorage the last few winters, there has been increased scrutiny on pre-engineered metal plate connected wood trusses.

Through site investigations of failed trusses and existing buildings throughout Anchorage, the capacity of the plates that connect trusses has been thrown into question. One engineering firm found that when inspecting the shop-built trusses, issues with the metal plates pulling out was found at the shop where they are fabricated, once brought to the site, and again when finally installed in place. To make sure these critical plate connections have additional residual capacity, a required fabrication tolerance of 20% is required on all truss over 30 feet in length. This means the plate connection will have 20% more capacity than expected, allowing for movement or displacement while it is being transported and installed.

23.20 – International Mechanical Code

802.10. Vent terminals – ice and snow protection. Previous versions of this amendment limited applicability to metal roofs of any slope; however, issues have been identified on steep pitched roofs also shedding snow and damaging vent terminals. This amendment adds asphalt shingle roofs with a pitch of 8/12 or higher to provide protection from ice and snow sliding, the same as for metal roofs.

1101.7 Changing refrigerant. Refrigerant has historically been a maintenance item for contractors to deal with, however with the introduction of A2L (mild flammability, versus the non-combustible and combustible counterparts), the national code added this as an item for code official review. To simplify this process and prevent an additional permit for maintenance item, the code was amended to remove the code official's role and focus on the contractor working with qualified engineer's or the equipment manufacturer when changing refrigerant.

23.25 – Uniform Plumbing Code

604.10. Plastic materials. Previous code cycles has limited the use of plastic materials for water service piping from the water source to the structures they serve. This is in line with Anchorage Water and Wastewater Utility requirements and includes an exception for specific piping approved by AWWU. This was extended more than 10 years ago to include private wells. In discussing at the code committee, the largest concern was for servicing if the pipes were to freeze. A local amendment exception was drafted to make sure structures that utilize plastic piping for their private well service will be of adequate size and accessibility to mitigate freezing issues if they arise.

908.2. Horizontal wet venting for bathroom groups. and 911.0. Circuit venting. Horizontal wet venting and circuit venting were removed by local amendment; previous code committees had decided this was too complicated to achieve in field. The latest code committee believes contractors can successfully install wet venting as long as a schematic is provided to the reviewer or inspector for approval. They also believe circuit venting can be executed correctly provided engineering design. This will allow more opportunities for solutions to plumbing problems that will help bring down the cost of construction.

1208.4.2. Medium pressure gas. Through coordination with Enstar Natural Gas, the options for medium pressure gas connections is extended to press-connect fittings; this allows more options for construction where previously only welded was allowed.

1210.3.6. Piping under exterior decks, porches, and walkways. Gas piping located under exterior stairs and decks are exposed to a highly corrosive environment; high humidity and often dusted with ice melts, these pipes will corrode and lead to many callouts by the gas utility to fix them. With the deck often being located close to the ground, this can lead to the deck needing to be partially demolished to gain access to the piping. This code amendment will still allow people to have gas fed outdoor fire pits, but will make their construction more resilient by requiring the use of corrugated stainless steel tubing (CSST).

23.30 – National Electrical Code

210.52(C)(2). Island and peninsular countertops and work surfaces. The original code requires a receptacle outlet at islands and peninsulas in the first 9 square feet and then again every 18 square feet along with one within 2 feet of the end of a peninsular. Previous code cycles simplified to a linear dimension, but still required more receptacle outlets. This code cycles amendment seeks to simplify further and only require a single receptacle outlet.

210.52(J). Parking spaces. This local amendment requires parking spaces of dwelling units to be provided with a duplex receptacle outlet, minimum one per dwelling unit. This is typically used for block heaters to be plugged in. The exception previously only allowed reduction for eight-plex and greater to reduce the number of outlets by the number of units that had indoor parking. The updated version changes to nine-plex and greater, but allows a 50% reduction in the number required or the total number of parking spaces, whichever is greater.

The conductors used for the required duplex receptacle outlets shall be 10 AWG copper minimum. This code cycle, the requirement to rough-in an electrical circuit for a future EV charging station was removed, so this simple increase in wire size will allow the duplex outlet to be changed in the future to a Level 2 charging station. There will still be a requirement under **220.57** (Electric vehicle supply equipment load) that will make sure the panel can support the load for an electric vehicle, which means the owner would effectively only need to change the receptacle and the breaker.

508. Lift stations. NFPA 820 provides language on installation of lift stations, however specific instances were identified that NFPA 820 did not cover. This amendment simplifies the requirements for lift stations that may not fit within the scope of NFPA 820.

23.45 – International Fire Code

108.2. Schedule of permit fees. It was requested that the fees for fire inspections be removed from AMC 10.75 and be placed in the fire code.

915. Carbon monoxide detection. The new national level code language has made an amendment unnecessary, so it has been removed.

1103.7.7. Group R-3 assisted living and custodial care facility. and 1103.5.7. Group R-4 and I-1 care facilities. Additional guidance has been needed where assisted living facilities are not able to meet the requirements of code. The fire department has developed alternatives in specific cases to assist these facilities to remain operational and reduce how often it is required to displace residents that can't meet the evacuation requirements. This has allowed more residents to remain in place while providing safeguards for their safety and wellbeing. This can be seen in the above amendments listed as well as **403.12.3.1** and **403.13.3.2**.

23.60 – International Energy Conservation Code

Table C402.1.2. Opaque building thermal envelope assembly maximum requirements, U-factor method. and Table C402.1.3. Opaque building thermal envelope insulation component minimum requirements, R-factor method. The insulation value used in the Anchorage amendments has typically been reduced from the IECC codes value for Climate Zone 7. This has been to help with construction costs; where Climate Zone 7 should utilize R-20 batt insulation (2x6 walls with insulation filling the voids) and R-4 continuous insulation (1" of rigid insulation applied to the exterior), our local amendments have kept it to only requiring the batt insulation. This leads to an overall reduction in cost, because there are additional trades involved to install the insulation and siding that would not be required when finishing with T1-11 plywood siding. For example, the cost for a house is approximately \$250/SF. The additional trades on a 1500 SF single family house could cost up to \$16/SF more, or a 6% increase in construction cost. With the current energy climate, the committee felt strongly we should advocate for additional energy savings, but did not want to increase the cost burden on new construction. Therefore, the values we've historically used (close to what is required for Climate Zone 4, like Seattle) is still an approvable minimum, but the enhanced (what is required to meet Climate Zone 7) will still be listed for owner's interested in reducing energy consumption.

C402.6.2. Air leakage compliance. The residential building code has had a requirement since the 2009 edition to complete an air leakage test on the building's thermal envelope. Title 23 previously had local amendments to remove this requirement by effectively tying to the commercial building code, until the 2018 edition where we adopted energy requirements separately for residential construction. At that time, the requirement for testing air leakage was aligned with the Alaska Housing Finance Corporations building codes. This was not specifically enforced by the building department, but has typically been handled by owner financing, where the owner will get better rates when they can get a specific energy rating. In the 2024 edition of the IECC, commercial projects are now being required to test for air leakage. The committee felt this was an appropriate measure to make sure new buildings are energy efficient, so no amendment was made to this section. This does not directly effect change of use or alterations.

C405.15. Renewable energy systems. This code cycle at the national level, the energy code has added mandatory renewable energy systems for commercial projects. This could be accomplished by on-site or off-site renewable energy. The committee felt that renewable energy, at this time, should be a voluntary upgrade owners can make, so the section was removed in its entirety.

C503.1. General (alterations). To increase the ability to complete maintenance and alterations to existing structures, the list of exemptions to increasing the R-value during an alteration was increased. While ideal to increase insulation during a renovation where drywall is removed, the committee determined it wasn't reasonable to require this update as long as insulation already exists in the cavity.

C505. Change of use or occupancy. The code at the national level added a requirement to upgrade the building thermal envelope when a change of use creates an increased energy use intensity rank or stays at the same intensity rank. The committee felt this was overly conservative, so it was modified to only apply to an increase.

23.65 – International Existing Building Code

304.4. Additional permit requirements for reroofing. Requirements for reroofing were enforced through a department policy. During the 2018 code adoption process, the requirements related to existing rooftop insulation being increased were added to the code. When a roof has higher insulation value, it is more likely to retain snow load longer. Some older roofs relied on the snow melting to prevent overloading the structural framing. This amendment requires the contractor/engineer to consider this during the reroof to verify the roof can support a full design snow load. An assembly ordinance changed this to only look at buildings constructed prior to 1970, but what the committee found is the issue is not limited by an age of construction; owners have come in for issues with excessive deflection and having to shovel their roof after having a reroof completed when they never had to in the past. This committee determined there should not be an age of construction limit on reroof requirements.

23.75 – ASME A17.1 – Safety Code for Elevators and Escalators

2.7.6.2. Location of machinery spaces and control spaces. For elevators to not utilize a machine room (machine-room-less or MRL elevator), the elevator industry has moved the control space inside of the hoistway of the elevator itself. This has required elevator installers, inspectors, and maintenance personnel to climb on top of the car to access the control space of the elevator. This is a dangerous area to work in and to minimize the risk of injury and the amount of time elevator personnel spend within the elevator shaft, this local amendment effectively requires the control space to be outside of the hoistway. This can be achieved by rotating the panel to be accessed from inside the elevator lobby. Other jurisdictions like New York City and the state of California have similar requirements for MRL elevators. This is a change welcomed by local elevator maintenance and repair personnel.

Following a presentation to the Community Economic Development Committee by the National Elevator Institute Inc. (NEII) in December, NEII requested a meeting to discuss clarifying the language to meet the intent of the code committee. The Department, along with the Building Board chair of the elevator code committee, met with representatives of NEII and elevator manufacturers. From this meeting, the language was refined to be more understandable and enforceable.

8.6.4.24. Systems to monitor and prevent automatic operation of passenger and freight elevators with faulty door contact circuits. The requirements for providing Door Lock Monitoring protection on both new and existing elevators appears in the 2022 edition of this code and this requirement addresses the most dangerous situation riding passengers could encounter with an elevator, which is the elevator moving within the hoistway with either a hoistway door or the car door not in its fully closed and locked position. This requirement would most likely require a full modernization or controller replacement on older elevators not already equipped with this protection and therefore this proposed amendment adds this retroactive requirement to the 2019 edition of the code and begins an extended period for compliance that should be provided so to allow equipment owners the opportunity to budget for the necessary modifications to their elevator system. A similar requirement is included in **8.6.5.19**.

23.75 – ASME A18.1 – Safety Standards for Platform Lifts and Stairway Chairlifts

2.7.1. Travel distance. This amendment will allow vertical platform lifts to be installed in more residential structures that have a rise greater than 14 feet; if the manufacturer has test data or reports to support these lifts going higher, the committee would like to see them be utilized. This will make installing lifts in residential properties more affordable.

23.85 – International Residential Code

R302.3.1. Dwelling unit separation. This amendment will allow a reduced fire separation for a dwelling unit added to an existing single family home or townhouse when it meets specific requirements like limited size and interconnected smoke detectors. This is to allow more modifications to existing dwellings to increase density without creating additional roadblocks. When a second unit is greater than 1200 square feet or will have separate smoke detectors, the proper fire separation will be required. This does not apply to new construction where the required separation is achievable due to the access provided.

R304.1. Location required (Protection of wood and wood-based products against decay). Wood decks have historically been required to be preservative treated, due to the potential for decay. However, local lumber yards don't keep all sizes of preservative treated lumber in stock. This can cause delays in construction when the contractor needs a special order member; they may order it late or use it in the wrong location or even cut it short and then they don't have the right material on site to replace it. The committee developed an alternative to pressure treating the wood by painting, applying ice and water shield, and capping the members. This is not done in other locations nationwide, but the committee felt this would adequately protect a non-preservative treated wood member.

N1102.5.1.3. Maximum air leakage rate. The requirement to provide an air leakage test for residential construction has been in the code, but we have previously allowed an air leakage rate up to 4 air changes per hour. At the building board, members discussed Alaska Housing Finance Corporation finding that over 90% of houses were testing at 3 air changes or less per hour. The

building board recommends changing to 3 air changes, since it has been proven achievable on new construction with current best practices.

23.110 – International Fuel Gas Code

411.1. Connecting Appliances. Appliances rigidly piped (particularly hanging unit heaters/furnaces) lack flex relief from earthquake movement. The serving gas supplier encountered countless rigid piping installations post the 2018 earthquake that had either loosened the union serving the appliance or sheered the appliance gas piping entirely. This amendment requires flexible connectors to be utilized for appliances when they aren't otherwise restrained against lateral (seismic) movement.

MUNICIPALITY OF ANCHORAGE
Summary of Economic Effects -- General Government

AO Number: 2026-33

Title: **AN ORDINANCE REPEALING ANCHORAGE MUNICIPAL CODE CHAPTER 10.75 INSPECTION FEES; REPEALING AND REENACTING ANCHORAGE MUNICIPAL CODE CHAPTERS 23.05 BUILDING REGULATIONS, 23.10 ANCHORAGE ADMINISTRATIVE CODE, 23.15 INTERNATIONAL BUILDING CODE, 23.20 INTERNATIONAL MECHANICAL CODE, 23.25 UNIFORM PLUMBING CODE, 23.30 NATIONAL ELECTRICAL CODE, 23.45 INTERNATIONAL FIRE CODE, 23.60 INTERNATIONAL ENERGY CONSERVATION CODE, 23.65 INTERNATIONAL EXISTING BUILDING CODE, 23.75 ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS, 23.76 ASME A18.1 SAFETY STANDARD FOR PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS, 23.85 INTERNATIONAL RESIDENTIAL CODE, and 23.110 INTERNATIONAL FUEL GAS CODE.**

Sponsor: **MAYOR**
Preparing Agency: Development Services Department

Others Impacted:

CHANGES IN EXPENDITURES AND REVENUES:		(In Thousands of Dollars)				
	FY26	FY27	FY28	FY29	FY30	
Operating Expenditures						
1000 Personal Services						
2000 Non-Labor						
3900 Contributions						
4000 Debt Service						
TOTAL DIRECT COSTS:	\$ -	\$ -	\$ -	\$ -	\$ -	
Add: 6000 Charges from Others						
Less: 7000 Charges to Others						
FUNCTION COST:	\$ -	\$ -	\$ -	\$ -	\$ -	
REVENUES:						
CAPITAL:						
POSITIONS: FT/PT and Temp						

PUBLIC SECTOR ECONOMIC EFFECTS:

Approval of this ordinance could have some economic effects on the public sector, but it would be difficult to project an exact amount, so ranges are considered. The noteworthy impacts include:

1. AMC 23.10.109.Table 3-A: Proposed increase in inspections included with a residential permit. Comparing previous years completed projects, this would decrease revenue between \$60k and \$100k annually.
2. AMC 23.10.109.Table 3-A: Proposed limitation on inspections included with a commercial permit and consolidating fees for projects under \$1m to a single modifier. Comparing previous years completed projects, this would increase revenue between \$100k and \$200k annually.
3. AMC 23.10.109.Table 3-E: Proposed increase in included inspections for retrofit permits. Comparing previous years completed projects, this would decrease revenue between \$60k and \$80k annually.

PRIVATE SECTOR ECONOMIC EFFECTS:

Approval of this ordinance could have some economic effects on the private sector, but it would be difficult to project an amount. Most of the modifications should reduce costs on construction. The noteworthy impacts include:

1. Machine roomless (MRL) elevators will now require the control space to be accessible from outside the hoistway. The department made multiple requests for cost impact to construction, but local and national elevator manufacturers could not provide any values.
2. XXXX

Prepared by: *Daniel King, P.E.*
Engineering Services Manager
Development Services Department

Telephone: 907-343-8301

Mr. Nakano,

Please consider our official request for modification to the International Building Code as adopted by the State of Alaska in Alaska Administrative Code Title 13, Chapter 50 (13 AAC 50) with deferred jurisdiction to the Municipality of Anchorage by 13 AAC 50.075.

Background

Single stairway apartment buildings have been a lightning rod for conversation nationwide. The need for additional housing, often in already densely populated areas, has brought about this conversation. While the International Code Council has worked to develop safe and incremental steps forward to allow additional housing with single stair, like considering extending the exception to a fourth story of four dwelling units in the 2027 code cycle, many jurisdictions have moved forward with allowing five or six stories of this use. In July of 2023, the Washington State legislature required a technical advisory group to provide recommendations for amendments for the states implementation of the 2024 International Building Code and requires the state building code to adopt these amendments by July of 2026 (See Washington [Senate Bill 5491](#)).

Sixteen other states or local jurisdictions currently that are either adopting allowances or requiring task forces to develop recommendations to allow up to six stories, including locations like Austin Texas, Tennessee and local jurisdictions within the state, and Oregon. Places that have had these provisions for decades have shown that the risk of fire death can be comparable to other types of housing (See Pew research, [“Small Single-Stairway Apartment Buildings Have Strong Safety Record”](#)). Additionally, allowing more forms of new housing will help with the replacement of older, less safe housing. If new construction can be made more accessible, other newer code requirements such as sprinklers will increase safety for occupants and property overall.

Some jurisdictions that have already adopted single stair apartments amendments, like Seattle who has had single stair allowances since 1977, have recommended caution to legislatures wanting to implement this change without proper consideration. They’ve stated the approval should rely on a robust plan review, strong fire safety provisions and inspections, and a responsive fire department capable of supporting the number of stories with the single stair (i.e. ready access and quick response with fire trucks). The Municipality of Anchorage has these safety measures in place to support this type of construction. The following discussion will go into the reasons for all the proposed provisions needed for this to be successful.

Discussion

The specific provisions we are proposing are important to consider. We have worked on this through our building code and fire code committees as well as modified internally based on input from stakeholders and the fire department to make sure this alternative method produces the same level of safety as other alternatives in the code, considering our jurisdictions capabilities.

Adding Section 420.12

Section 420.12 Single Exit Buildings with Group R-2 Occupancies.

Notwithstanding Section 1006.3.3, stories containing Group R-2 occupancy are permitted to be served by a single exit where in compliance with the provisions of sections 420.12.1 through 420.12.3 as applicable.

This was placed in Chapter 4 because it is intended to be used as special provisions related to R-2 occupancies. Other jurisdictions have placed this in Chapter 10 for egress, but due to the additional requirements required to have a successful single stair residential building, this was considered special detailed requirements. Reference to section 1006.3.3 “Egress based on occupant load” is included saying the requirement for two exits to be provided would not apply when the provisions of this section are utilized.

Part 1 – General Requirements

420.12.1 General requirements. *Each story of Group R-2 occupancy is permitted to be served by a single exit provided all the following criteria are met:*

- 1. The building shall be located within the Anchorage Building Safety Service Area.*
- 2. The building shall be not more than six stories, including basements.*
 - a. Roofs shall be used for maintenance only and shall not be occupiable.*
 - b. The highest occupiable floor shall not exceed 75 feet above the lowest level of fire department vehicle access.*
- 3. Each Group R-2 story shall be limited to four dwelling units (apartments). Other R-2 uses are not allowed.*
- 4. The exit access travel distance shall not exceed 125 feet.*
- 5. The minimum stairway width shall be 44 inches.*
- 6. Interior exit stairways serving more than 4 stories shall be protected with smokeproof enclosures constructed in accordance with Section 909.20.*
- 7. There shall be no openings within 10 feet of unprotected openings in the stairway enclosure. The required exit doors having a minimum one-hour fire-resistance rating shall be considered protected for the intent of this provision.*
- 8. Electrical receptacles located in an interior exit stairway shall be prohibited.*

Our deferred jurisdiction as the Anchorage Building Safety Service Area (BSSA) has a robust program in place for building plan review and inspections. This allows us to be sure that not only the provisions in this section of code, but the provisions for mechanical, electrical, plumbing, etc. are reviewed and constructed to the highest safety standard. We do not provide plan review outside the BSSA; therefore, we would not seek approval for the Municipality in those areas.

Further, our fire department within the BSSA has an Insurance Services Office (ISO) rating of 1, meaning we provide the exemplary fire protection through our staffing and training as well as equipment and station layout throughout the city. In section 2, you will see how we are limiting the use of this provision in areas without adequate water utilities. Our fire department can provide the required fire response to meet the needs of such construction if the need were to arise.

We understand that you may consider separate state amendments that would require the ISO rating explicitly, but we are presenting our request for only our jurisdiction at this time. Later provisions adopted by the state would be discussed and the request for modification may not be required at a future time, depending on the final language the state adopts.

Our provision on the number of stories limits structures to six stories, including potential basements. This limits the number of stories that would need to be accessed by the singular stair.

Two requests by your office were to not allow accessible roof structures and to require structures over 75 feet to have a smoke control system. We've included that the roof shall not be occupiable and understand the requested provision for high-rise construction. With that in mind, we are limiting our request to structures that do not meet the definition of high rise. Further allowance by the state may be made, but we are only requesting for construction not considered a high-rise. We still include item 6 for smoke proof enclosures per 909.20 when serving more than four stories, which is more restrictive than high-rise construction would typically require.

Our requirement to limit openings near unprotected openings in the single stair is taken from the Seattle amendment; this provision is to preempt fires outside the stairwell from entering. Additionally, no receptacle outlets are allowed within the stairwell, further limiting the potential for fires to develop within the protected stair area.

Part 2 – Fire protection requirements.

420.12.2 Fire protection requirements. *All buildings with one or more stories of Group R-2 occupancy served by a single exit shall provide the following:*

- 1. An approved water source capable of supplying the required fire flow for protection in compliance with IFC Section 507. Exceptions as listed in AMC 23.45.507.1 for areas of the jurisdiction not served by a water utility shall not be applied.*
- 2. Throughout the entire building, an automatic sprinkler system in compliance with Section 903.3.1.1.*
 - a. Omission of sprinkler locations in accordance with NFPA 13 shall not be permitted.*
 - b. Interior exit stairways shall be protected in accordance with NFPA 13 for combustible stairs regardless of the stairway construction.*
 - c. Decks, porches, and balconies shall be protected in accordance with NFPA 13 regardless of construction type.*

3. *Throughout the entire building, a manual fire alarm system with automatic smoke detection that activates the occupant notification system in accordance with Section 907.5.*
4. *Smoke detectors in common spaces outside dwelling units, including but not limited to gathering areas, laundry rooms, mechanical equipment rooms, storage rooms, interior corridors, interior exit stairways, and exit passageways.*
5. *Automatic smoke detection listed to UL 268 shall be used within the dwelling units and shall be connected to the building fire alarm in accordance with 907.2.11.7 to satisfy the requirements of 907.2.11.2 for single- and multi-station smoke alarms.*

Part 2 covers the specific fire protection elements of the code amendment and was coordinated through the fire code committee as well as through the Anchorage Fire Department. The first requirement is one of the most important modifications; the water source must be capable of supplying the required water flow for the fire suppression system. Any exceptions for areas not served by a water utility would not be eligible for any reduction or omission of stored water. This will typically restrict the locations of this type of development to already developed portions of town, since the alternative storage would be infeasible in most cases to keep on site.

The second item extends the existing requirement for fire sprinkler to not allow any omitted locations, including closets or bathrooms, as NFPA 13 may allow. It also requires sprinklers to be installed in the stairway as if it were combustible and at balconies regardless of the construction type, which further limits the possibility of a fire spreading.

Part 3 – Mixed occupancy requirements.

420.12.3 Mixed occupancy requirements. *Mixed occupancy shall be permitted within buildings with stories of Group R-2 occupancy served by a single stair, provided all the following criteria are met:*

1. *Other occupancies shall be separated from the Group R-2 occupancy with a minimum 2-hour fire separation in compliance with 707 and 711. Exemptions in Section 711.2.3 are not permitted.*
2. *Other occupancies shall comply with all provisions of this code, including those of 1006.3.3.*
3. *Other occupancies shall not communicate with the Group R-2 occupancy portion of the building or with the single-exit stairway that serves them.*
Exception: *Parking garages accessory to the Group R occupancy are permitted to communicate with the exit stairway.*
4. *The exit serving the R-2 occupancy shall not discharge through any other occupancy, including an accessory parking garage.*

5. *Automatic smoke detection installed outside the Group R-2 occupancies shall utilize multi-criteria smoke detection listed in accordance with UL 268, UL 521, and UL 2075.*

The opportunity to support mixed occupancy is integral to the success of this provision. This sort of structure would make the most sense on a small parcel with limited space to build out. Where it's been most successful is on lots that couldn't support more than four dwelling units per floor already. At the same time, these lots would need space for the residents to park their vehicles. This would usually be done as a parking garage underneath the residential units, which would constitute a mixed occupancy. Additionally, when you have more than a handful of tenants, it is common to have an office space for leasing purposes and potentially gym areas for residents. This would be Group B and Group A-2 uses which would classify the building as mixed occupancy.

If these uses weren't necessary drivers on a specific project, most residents in higher density areas, like in Anchorage's midtown and downtown districts, would still not elect to rent an apartment on the first floor of the building, where all their apartment windows would be facing public ways. Therefore, the value in a set of first floor apartments would be well under the more desirable upper floor units. Not allowing the mixed occupancy creates an unnecessary barrier and disincentive to the potential users of this code exception. This is why we feel allowing mixed occupancy is crucial to the success of this request.

The provisions of part 3 are focused on maintaining the single stair exit for the dwelling units by disallowing the mixed use of the single stair. The other occupancies (e.g. gyms, businesses, restaurants, etc.) would not be allowed access to the stairs serving the apartments except for the residents' parking garage. Additionally, the other occupancies will be separated from the residential occupancy by a minimum 2-hour fire separation.

The final large provision in providing safety for the mixed occupancy is the other uses, not being given access to the residential single exit stair, are still required to meet all the provisions of the code, including the number of exits required by Section 1006. This means if the mixed use included a second story of business offices with occupant load great than 29, they would be required to have two exits from the second floor, separate from the staircase serving the residential units.

Conclusion

We believe this will be one of the necessary tools to address Anchorage's aging housing and will bring new, safer construction to our jurisdiction. These provisions have been considered carefully and we appreciate your time and attention to this important matter.

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