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3 **CLERK'S OFFICE**
4 **APPROVED**
5 Date: 1/29/08

Submitted by: Chair of the Assembly at
the Request of the Mayor
Prepared by: Development Services
For reading: December 18, 2007

6 ANCHORAGE, ALASKA
7 AO No. 2007- 174
8

9 AN ORDINANCE REPEALING AND REENACTING ANCHORAGE MUNICIPAL
10 CODE TITLE 23 TO ADOPT 2006 AND OTHER RECENT EDITIONS, AND
11 ENACTING LOCAL AMENDMENTS OF THE FOLLOWING CODES:
12 ADMINISTRATIVE; BUILDING; MECHANICAL; PLUMBING; ELECTRICAL; FIRE;
13 FIRE PROTECTION SERVICE OUTSIDE SERVICE AREAS; ENERGY
14 CONSERVATION; EXISTING BUILDINGS; ANCHORAGE DANGEROUS
15 BUILDINGS; SAFETY CODE FOR ELEVATORS AND ESCALATORS; SAFETY
16 STANDARD FOR PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS;
17 RESIDENTIAL; SCHOOL RELOCATABLES; MOBILE AIRCRAFT SHELTERS;
18 GRADING, EXCAVATION AND FILL; AND FUEL GAS.
19

20
21 THE ANCHORAGE ASSEMBLY ORDAINS:
22

23 **Section 1.** Anchorage Municipal Code Title 23 is hereby repealed in its entirety and
24 reenacted to read as follows:
25

26 **TITLE 23 BUILDING CODES**
27

- | | | |
|----|-------|---|
| 28 | 23.05 | Building Regulations |
| 29 | 23.10 | Anchorage Administrative Code, 2006 Edition |
| 30 | 23.15 | International Building Code, 2006 Edition, including appendices A-
31 C, G and H |
| 32 | 23.20 | International Mechanical Code, 2006 Edition |
| 33 | 23.25 | Uniform Plumbing Code, 2006 Edition, except Chapters 12 and 15,
34 including appendices A, B, D, I, and L |
| 35 | 23.30 | National Electrical Code, 2005 Edition, including the appendices |
| 36 | 23.45 | International Fire Code, 2006 Edition, including Appendices B – G |
| 37 | 23.55 | Fire Protection Service Outside Service Area |
| 38 | 23.60 | Energy Conservation in New Building Design,
39 ANSI/ASHRAE/IES 90A-1980, ANSI/ASHRAE/IES 90.1-1989,
40 ASHRAE/IES 90B-1975, and ASHRAE 90C-1977 |
| 41 | 23.65 | International Existing Buildings Code, 2006 Edition |
| 42 | 23.70 | Anchorage Dangerous Buildings Code |
| 43 | 23.75 | American National Standards Institute/American Society of
44 Mechanical Engineers ANSI/ASME A17.1 2004 Safety Code for
45 Elevators and Escalators including appendices |
| 46 | 23.76 | American National Standards Institute/American Society of
47 Mechanical Engineers ANSI/ASME A18.1-2004 Safety Standard
48 for Platform Lifts and Stairway Chairlifts |
| 49 | 23.85 | International Residential Code, 2006 Edition, Chapters 1-11, and
50 Appendix E |
| 51 | 23.95 | School Relocatables, 1997 Edition |

- 23.100 Mobile Aircraft Shelters, 1997 Edition
23.105 Grading, Excavation and Fill, 2006 Edition
23.110 International Fuel Gas Code, 2006 Edition, except Chapter 1,
including Appendix A

23.05.010 Adoption of Codes

The Municipality of Anchorage, pursuant to Charter section 10.04, adopts and incorporates by reference the following codes of technical regulation.

TABLE INSET:

- 23.05 Building Regulations
- 23.10 Anchorage Administrative Code
- 23.15 International Building Code, 2006 Edition, including appendices A-C,
G and H
- 23.20 International Mechanical Code, 2006 Edition
- 23.25 Uniform Plumbing Code, 2006 Edition, except Chapters 12 and 15,
including appendices A, B, D, I, and L
- 23.30 National Electrical Code, 2005 Edition, including the appendices
- 23.45 International Fire Code, 2006 Edition, including Appendices B – G
- 23.55 Fire Protection Service Outside Service Area
- 23.60 Energy Conservation in New Building Design, ANSI/ASHRAE/IES
90A-1980, ANSI/ASHRAE/IES 90.1-1989, ASHRAE/IES 90B-1975,
and ASHRAE 90C-1977
- 23.65 International Existing Buildings Code, 2006 Edition
- 23.70 Anchorage Dangerous Buildings Code
- 23.75 American National Standards Institute/American Society of
Mechanical Engineers ANSI/ASME A17.1 1996 Safety Code for
Elevators and Escalators including appendices
- 23.76 American National Standards Institute/American Society of
Mechanical Engineers ANSI/ASME A18.1-2003 Safety Standard for
Platform Lifts and Stairway Chairlifts
- 23.85 International Residential Code, 2006 Edition. Chapters 1-11, and
Appendix E
- 23.95 School Relocatables, 1997 Edition
- 23.100 Mobile Aircraft Shelters, 1997 Edition
- 23.105 Grading, Excavation and Fill, 2006 Edition
- 23.110 International Fuel Gas Code, 2006 Edition, except Chapter 1,
including Appendix A

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 within the Anchorage Building Safety Service Area (ABSSA).

23.05.040 Local Amendments. The various codes adopted by section 23.05.010 are amended by the local amendments set forth in chapters 23.10

through 23.110 inclusive. The last digits of the section numbers (after the title and chapter digits) are the section of the Uniform or International Codes to which the amendment refers; i.e., section 23.20.303.3 refers to amendments to section 303.3 of the International Mechanical Code.

CHAPTER 23.10 2006 ANCHORAGE ADMINISTRATIVE CODE

Section 23.10.101	Title, scope and general
Section 23.10.102	Application to existing buildings and building service equipment
Section 23.10.103	Moved buildings
Section 23.10.104	Temporary and seasonal use structures
Section 23.10.105	Historic buildings
Section 23.10.106	Definitions
Section 23.10.107	Conflicting provisions
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Section 23.10.202	Powers and duties of the building official
Section 23.10.203	Unsafe buildings, structures or building service equipment
Section 23.10.204	Board of appeals
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Section 23.10.206	Stop Work Order
Section 23.10.207	Penalties and Remedies
Section 23.10.301	Permits
Section 23.10.302	Application for permit
Section 23.10.303	Permits issuance
Section 23.10.304	Fees
Section 23.10.305	Inspections
Section 23.10.306	Special inspections
Section 23.10.307	Structural observation
Section 23.10.308	Connection to utilities
Section 23.10.309	Certificate of occupancy
23.10. Table 3-A	Building permit fees
23.10. Table 3-B	Plan review fees
23.10. Table 3-C	Inspection Fees
23.10. Table 3-D	Electrical permit fees
23.10. Table 3-E	Mechanical Permit Fees
23.10. Table 3-F	Plumbing permit fees
23.10. Table 3-G	Elevator, escalator, and dumbwaiter permit fees
23.10. Table 3-H	Grading permit fees
23.10. Table 3-I	Mobile home permit fees
23.10. Table 3-J	Swimming pool, spa and hot tub fees
23.10. Table 3-K	Sign permit fees
23.10. Table 3-L	Licenses and testing fees
23.10. Table 3-M	On-site services fees
23.10. Table 3-N	Miscellaneous fees

Section 23.10.101 Title, scope and 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 Purpose. The purpose of this code is to provide for the administration and enforcement of the technical codes adopted by this jurisdiction.

23.10.101.3 Scope. The provisions of this code shall serve as the administrative, organizational and enforcement rules and regulations for the technical codes regulating site preparation and construction, alteration, moving, demolition, repair, use and occupancy of buildings, structures and building service equipment within this jurisdiction.

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

23.10.101.5 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 of Anchorage. 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 of Anchorage.

Section 23.10.102 Application to existing buildings and building service equipment

23.10.102.1 General. Buildings, structures and their 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.

Section 23.10.103 Moved buildings

Buildings or structures moved into the Anchorage Building Safety Service area shall comply with the provisions of this code for new buildings or structures. Buildings or structures moved within the Anchorage Building Safety Service Area shall comply with the provisions of this code for new or existing buildings or structures, and shall have a code compliance inspection by the Municipality of Anchorage for fire and life safety evaluation prior to 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 23.10.104 Temporary and seasonal use structures

23.10.104.1 Temporary structures. Buildings, structures, sheds, canopies, fences, reviewing stands and other structures of a temporary nature may be erected by special permit from the building official for a period of 180 days. Temporary structures may be erected without meeting all requirements for permanent structures, but shall meet the following conditions:

- A. Temporary structures shall be limited to Group A, Group B, Group M, and Group U occupancies;
- B. The size of the structure shall not exceed 1,500 square feet nor be more than one story in height;
- C. The structure shall meet the required yards and separation from adjacent buildings as provided by the municipal land use regulations, but in no case less than ten feet;
- D. Temporary structures extensively used or essential for public use shall comply with the building code for accessibility. Structures directly associated with the actual processes of major construction, such as scaffolding, bridging, or materials hoists, are not included;
- E. All temporary structures shall meet structural requirements in regard to type of materials, spans, and stresses as determined to be safe by the building official;
- F. Mobile homes and trailers intended for use shall be of manufactured design. Homemade mobile homes or trailers shall not be allowed;
- G. The structure and all associated materials shall be removed from the approved location on or before the expiration date of the permit;
- H. Permits for temporary structures may be extended on a one-time basis for 180 days, upon application to the building official with a payment per Table 3-A;
- I. When a building permit has been issued for new construction or remodeling, a permit for a fence or construction shacks shall not be required;
- J. 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;
- K. Normally occupied temporary structures shall have sanitary facilities.

23.10.104.2 Seasonal use structures. Sale stalls, carnivals, fairs and assembly pavilions or tents, including structures, such as tent frames, and attending support structures, such as decks, boardwalks, light poles, and plumbing/mechanical and electrical installations, may be erected without meeting all requirements for permanent structures, but shall meet the following conditions:

- A. Seasonal use structures shall be limited to Groups A, B and M type occupancies and located in the B-2, B-3 or I zoning districts;
- B. The structure shall not exceed one story in height;
- C. Such structures and installations are subject to a maximum occupancy not to exceed eight months in any one calendar year;
- D. 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;

- 1 E. The annual code compliance inspection shall certify there are no
- 2 hazards to health, life, or safety and proper maintenance of the
- 3 structure or installations has been performed prior to re-occupancy;
- 4 F. Continued occupancy of seasonal use structures shall be allowed only
- 5 if permitted and occupied within six months of the last occupancy,
- 6 use or vacation. If not, the structure shall be removed from the
- 7 premises so as to leave it in a clean, level, nuisance-free condition;
- 8 G. Seasonal activities with seating areas shall provide handicap-
- 9 accessible temporary or permanent toilet facilities as required by the
- 10 Building Code;
- 11 H. Seasonal use structures extensively used or essential for public use
- 12 shall comply with the Building Code, providing accessibility for the
- 13 disabled;
- 14 I. All seasonal use structures shall meet structural requirements in
- 15 regard to type of materials, spans, and stresses as determined to be
- 16 safe by the building official.
- 17

18 **23.10.104.3 Permit application.** The application for a temporary or

19 seasonal use permit shall include:

- 20 A. Property owner's name and mailing address;
- 21 B. Legal description of the proposed site with a plot plan showing the
- 22 proposed location of the structure on the premises, location of any
- 23 existing structures, and the location of any existing or proposed
- 24 parking areas;
- 25 C. Length of use of the proposed structure, if a temporary or special
- 26 event structure. No permit shall be required if the use is 14 days or
- 27 less. However, exemption from the permit requirements of this code
- 28 shall not be deemed to grant authorization for any work to be done in
- 29 violation of the provisions of this section or any other laws or
- 30 ordinances of this jurisdiction;
- 31 D. Description of the proposed use and a justification of temporary or
- 32 seasonal occupancy;
- 33 E. All required fees and cash bonds.
- 34

35 **23.10.104.4 Fees.** A nonrefundable fee shall accompany applications for

36 temporary or seasonal use structures. Applications for the annual code

37 compliance inspection, for seasonal use structures shall be accompanied by

38 a fee for each inspector per hour.

39

40 **23.10.104.5 Cash bonds.** For all temporary or seasonal use structures,

41 prior to permit approval, the applicant shall post bond with the building

42 official. The bond shall be in the form of cash or certified check in the

43 amount of \$5,000.00:

- 44 A. Upon removal of the temporary or seasonal use structure by the
- 45 applicant and compliance with all terms of this section, the bond shall
- 46 be returned in full to the applicant;
- 47 B. Thirty days after receipt of a notice from the building official to the
- 48 property owner or applicant of failure to comply with the terms of the
- 49 permit, the bond shall be forfeited at the applicant's sole expense.
- 50

Section 23.10.105 Historic buildings

Repairs, alterations and additions necessary for the preservation, restoration, rehabilitation or continued use of a building, structure, or its building service equipment may be made without conforming to the requirements of the technical code when authorized by the building official, provided:

- A. The building or structure has been designated by official action of the Anchorage Municipal Assembly or its delegated authority as having special historical or architectural significance.
- B. Unsafe conditions as described in this code are corrected.
- C. The restored building or structure and its building service equipment shall be no more hazardous based on life safety, fire safety and sanitation than the existing building.
- D. The building or structure shall comply with the historic building requirements in the Existing Building Code.

Section 23.10.106 Definitions

For the purpose of this code, certain terms, phrases, words and their derivatives shall be construed as specified in this section. Where terms are not defined, they shall the ordinary accepted meanings within the context with which they are 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 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.

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

Building Code is the Building Code, as adopted by this jurisdiction.

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

Building Official is the officer or other designated authority charged with the administration and enforcement of this code, or a regularly authorized deputy.

1 *Building Service Equipment* refers to the plumbing, mechanical, electrical and
2 elevator equipment including piping, wiring, fixtures and other accessories providing
3 sanitation, lighting, heating, ventilation, cooling, refrigeration, fire-fighting and
4 transportation facilities essential to the occupancy of the building or structure for its
5 designated use.

6
7 *Dangerous Building Code* is the Abatement of Dangerous Buildings Code.

8
9 *Electrical Code* is the Electrical Code, as adopted by this jurisdiction.

10
11 *Elevator Code* is the safety code for elevators, dumbwaiters, escalators and moving
12 walks as adopted by this jurisdiction.

13
14 *Existing Building Code* is the Existing Building Code, as adopted by this jurisdiction.

15
16 *Fuel Gas Code* is the Fuel Gas Code adopted by the jurisdiction.

17
18 *Jurisdiction*, as used in this code, is a state or political subdivision, adopting this code
19 for administrative regulations within its area of authority.

20
21 *Listed* and *Listing* are terms referring to equipment and materials included in a list
22 published by an approved testing laboratory, inspection agency, or other organization
23 concerned with product evaluation maintaining periodic inspection of current
24 productions of listed equipment or materials. The published list shall state the
25 material or equipment complies with approved nationally recognized codes, standards
26 or tests and has been tested or evaluated and found suitable for use in a specified
27 manner.

28
29 *Mechanical Code* is the Mechanical Code, as adopted by this jurisdiction.

30
31 *Occupancy* is the purpose for which a building, or part thereof, is used or intended to
32 be used.

33
34 *Owner* is any person, agent, firm or corporation with a legal or equitable interest in
35 the property.

36
37 *Permit* is an official document or certificate issued by the building official authorizing
38 performance of a specified activity.

39
40 *Person* is a natural person, heir, executor, administrator or assign, and also includes a
41 firm, partnership or corporation, its or their successor or assign, or agent of any of the
42 aforesaid.

43
44 *Plumbing Code* is the plumbing code, as adopted by this jurisdiction.

45
46 *Repair* is the reconstruction or renewal of any part of an existing building, structure or
47 building service equipment for the purpose of its maintenance.

48
49 *Retrofit* is the replacement of any part of the existing building service equipment with
50 parts developed or made available after the original installation.

1
2 *Shall*, as used in the code, is mandatory.

3
4 *Structural Observation* means the visual observation of the structural system, for
5 general conformance to the approved plans and specifications, at significant
6 construction stages and at completion of the structural system. Structural observation
7 does not include or waive the responsibility for the inspections required in sections
8 305 and 306.

9
10 *Structure* is that which is built or constructed, an edifice or building of any kind, or
11 any piece of work artificially built up or composed of parts joined together in some
12 definite manner.

13
14 *Technical Codes* refer to those codes adopted by this jurisdiction containing the
15 provisions for design, construction, alteration, addition, repair, removal, demolition,
16 use, location, occupancy and maintenance of buildings and structures and building
17 service equipment as herein defined.

18
19 *Valuation* or *Value* as applied to a building and its building service equipment, shall
20 be the estimated cost to replace the building and its building service equipment in
21 kind, based on current replacement costs.

22
23 **Section 23.10.107 Conflicting provisions**

- 24 A. When conflicting provisions or requirements occur between this code, the
25 technical codes and other codes or laws, the most restrictive shall govern.
26 B. When conflicts occur between the technical codes, those provisions providing
27 the greater safety to life shall govern. In other conflicts where sanitation, life
28 safety or fire safety are not involved, the most restrictive provision shall
29 govern.
30 C. Where, in a specific case, different sections of the technical codes specify
31 different materials, methods of construction or other requirements, the most
32 restrictive shall govern. When there is a conflict between a general
33 requirement and a specific requirement, the specific requirement shall be
34 applicable.
35 D. When conflicts occur between specific provisions of this code and
36 administrative provisions in a technical code, which is then applicable within
37 this jurisdiction, those provisions becoming the law most recently shall
38 prevail.

39
40 **CHAPTER 2 ORGANIZATION & ENFORCEMENT.**

41
42 **Section 23.10.201**

43 **23.10.201.1 Creation of enforcement agency.** There is hereby
44 established in the jurisdiction a code enforcement agency under the
45 administrative and operational control of the building official.

46
47 **23.10.201.2 General.** Whenever the term or the title “administrative
48 authority,” “responsible official,” “building official,” “chief inspector,”
49 “code enforcement officer,” or similar designation is used herein or in any

of the technical codes, it shall be construed to mean the building official designated by the appointing authority of this jurisdiction.

Section 23.10.202 Powers and duties of the building official

23.10.202.1 General. The building official is hereby authorized and directed to enforce the provisions of this code. The building official is authorized 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. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

23.10.202.2 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.

23.10.202.3 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 thirty (30) days to appeal to the board of appeals established under section 23.10.204. 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.

23.10.202.4 Inspections. The building official shall make all of the required inspections, or the building official is authorized to accept reports of inspections 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.

23.10.202.5 Identification. The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

23.10.202.6 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.

23.10.202.7 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.

23.10.202.8 Liability. The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the 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. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding instituted in pursuance of the provisions of this code.

23.10.202.9 Approved materials and equipment. Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

23.10.202.9.1 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.

23.10.202.10 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.

23.10.202.11 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

1 approved. An alternative material, design or method of construction shall
2 be approved where the building official finds the proposed design is
3 satisfactory and complies with the intent of the provisions of this code, and
4 the material, method or work offered is, for the purpose intended, at least
5 the equivalent prescribed in this code in quality, strength, effectiveness, fire
6 resistance, durability and safety.

7
8 **23.10.202.11.1 Research reports.** Supporting data, where
9 necessary to assist in the approval of materials or assemblies not
10 specifically provided for in this code, shall consist of valid research
11 reports from approved sources.

12
13 **23.10.202.11.2 Tests.** Whenever there is sufficient evidence of
14 compliance with the provisions of this code, or evidence a material
15 or method does not conform to the requirements of this code, or in
16 order to substantiate claims for alternative materials or methods, the
17 building official is authorized to require tests as evidence of
18 compliance, to be made at no expense to the jurisdiction. Test
19 methods shall be as specified in this code or by other recognized
20 test standards. In the absence of recognized and accepted test
21 methods, the building official shall approve the testing procedures.
22 Tests shall be performed by an approved agency. Reports of such
23 tests shall be required for retention of public records.

24
25 **23.10.202.12 Cooperation of other officials and officers.** The building
26 official may request and shall receive, the assistance and cooperation of
27 other officials of this jurisdiction as required in the discharge of the duties
28 required by this code or other pertinent laws or ordinance.

29
30 **23.10.202.13 Contractor license suspension or revocation.** The building
31 official may cancel, suspend, or revoke the license of a contractor who
32 displays incompetence or lack of knowledge in matters relevant to such
33 license, or if such license was obtained by fraudulent measures. If the
34 license of any person is so cancelled or revoked, another such license shall
35 not be granted to such person within twelve (12) months after the date of
36 such cancellation or revocation. Any action may be appealed to the Board
37 of Building Regulation Examiners and Appeals (Building Board).

38
39 **Section 23.10.203 Unsafe buildings, structures or building service**
40 **equipment.**

41 **23.10.203.1 Conditions.** Structures or existing equipment that are or
42 hereafter become unsafe, unsanitary or deficient because of inadequate
43 means of egress facilities, inadequate light and ventilation, or constitute a
44 fire hazard, or are otherwise dangerous to human life or the public welfare,
45 or involve illegal or improper occupancy or inadequate maintenance, shall
46 be deemed an unsafe condition. Unsafe structures shall be taken down and
47 removed or made safe, as the building official deems necessary and as
48 provided for in this section. A vacant structure not secured against entry
49 shall be deemed unsafe.
50

1 **23.10.203.2 Record.** The building official shall cause a report to be filed
2 on an unsafe condition. The report shall state the occupancy of the structure
3 and the nature of the unsafe condition.
4

5 **23.10.203.3 Notice.** If an unsafe condition is found, the building official
6 shall serve on the owner, agent or person in control of the structure, a
7 written notice describing the condition deemed unsafe and specifying the
8 required repairs or improvements to be made to abate the unsafe condition,
9 or requires the unsafe structure to be demolished within a stipulated time.
10 Such notice shall require the person notified to declare immediately to the
11 building official acceptance or rejection of the terms of the order.
12

13 **23.10.203.4 Method of service.** Notice shall be deemed properly served if
14 a copy is:

- 15 A. Delivered to the owner personally;
16 B. Sent by certified or registered mail addressed to the owner at the
17 last known address with return receipt requested; or
18 C. Delivered in any other manner as prescribed by local law.
19 D. If the certified or registered letter is returned showing the letter was
20 not delivered, a copy of the letter shall be posted in a conspicuous
21 place in or about the structure affected by such notice. Service of
22 notice in the foregoing manner upon the owner's agent or upon the
23 person responsible for the structure shall constitute service of notice
24 upon the owner.
25

26 **23.10.203.5 Restoration.** The structure or equipment determined to be
27 unsafe by the building official is permitted to be restored to a safe
28 condition. To the extent repairs, alterations, or additions are made or a
29 change of occupancy occurs during the restoration of the structure, such
30 repairs, alterations, additions or change of occupancy shall comply with the
31 requirements of this code.
32

33 **23.10.203.6 Connection of service utilities.** No person shall make
34 connections from a utility, source of energy, fuel or power to any building
35 or system regulated by this code for which a permit is required, until
36 released by the building official.
37

38 **23.10.203.7 Temporary connection.** The building official shall have the
39 authority to authorize the temporary connection of the building or system to
40 the utility source of energy, fuel, or power.
41

42 **23.10.203.8 Authority to disconnect service utilities.** The building
43 official shall have the authority to authorize disconnection of utility service
44 to the building, structure, or system regulated by this code and the codes
45 referenced in case of emergency where necessary to eliminate an
46 immediate hazard to life or property. The building official shall notify the
47 serving utility and, whenever possible, the owner and occupant of the
48 building, structure, or service system of the decision to disconnect prior to
49 taking such action. If not notified prior to disconnecting, the owner or

1 occupant of the building, structure, or service system shall be notified in
2 writing as soon as practical thereafter.

3
4 **Section 23.10.204 Board of appeals**

5 **23.10.204.1 General.** In order to hear and decide appeals of orders,
6 decisions or determinations made by the building official relative to the
7 application and interpretations of the technical code, there shall be and is
8 hereby created a board of appeals consisting of members qualified by
9 experience and training to pass upon matters pertaining to building
10 construction and building service equipment, and not employees of the
11 jurisdiction. The building official shall be an ex officio member and shall
12 act as secretary to the board but shall not vote upon any matter before the
13 board. The board of appeals shall be appointed by the governing body and
14 shall hold office at its pleasure. The board shall adopt rules of procedures
15 for conducting business and shall render all decisions and findings in
16 writing to the appellant, with a duplicate copy to the building official.

17
18 **23.10.204.2 Limitations of authority.** An application for appeal shall be
19 based on a claim that the true intent of this code or the rules legally adopted
20 thereunder were incorrectly interpreted, the provisions of this code do not
21 fully apply or an equally good or better form of construction is proposed.
22 The board shall have no authority to waive requirements of this code.

23
24 **23.10.204.3 Board of Building Regulation Examiners and Appeals**
25 **(Building Board) established.**

26
27 A. There is established a Board of Building Regulation Examiners and
28 Appeals (hereinafter "Building Board"), as described in
29 section 4.40.030, consisting of eleven (11) members appointed by the
30 mayor, subject to confirmation by the Assembly, qualified by
31 experience or training to pass on matters pertaining to building
32 construction, as follows:

- 33
34 1. At least two (2) members shall be Architects registered in the
35 State of Alaska.
36 2. At least two (2) members shall be Professional Engineers
37 registered as Civil Engineers in the State of Alaska.
38 3. At least one (1) member shall be a Professional Engineer
39 registered as a Mechanical Engineer in the State of Alaska
40 4. At least one (1) member shall be a Professional Engineer
41 registered as an Electrical Engineer in the State of Alaska.
42 5. At least two (2) members shall be licensed General
43 Contractors actively engaged in general building construction
44 and/or home building.
45 6. At least one (1) member shall be a licensed Electrical
46 Contractor actively engaged in the electrical trade.
47 7. At least one (1) member shall be a licensed Plumbing
48 Contractor actively engaged in the plumbing trade.

8. At least one (1) member shall be a licensed Mechanical Contractor actively engaged in the mechanical trade.

B. Six (6) members of the Building Board shall constitute a quorum for the transaction of any business. For affirmative action on quasi-judicial matters by the Building Board, there shall be a concurring vote of six (6) members.

C. Building Board shall hear and decide appeals from actions of administrative officials relating to code regulations under title 23. A person with the right to appeal has thirty (30) days from the date of the action of an administrative official to file an appeal with the secretary to the building board, unless a longer time period is stated in writing by the building official. If no appeal is filed within this time period, the action of the administrative official is deemed final and binding and not subject to any further appeal.

23.10.204.4 Secretary to building board. The building official or designee shall be an ex-officio member without vote and shall act as secretary to the Board, shall prepare all correspondence, send out all required notices, keep minutes of all meetings, and maintain a file on each case coming before the Building Board.

23.10.204.5 Appeal filing fee. The cost of filing an appeal to the Building Board is \$500.00 and shall accompany the filing of the appeal. The secretary may waive the fee if the appellant demonstrates financial hardship or indigence.

Section 23.10.205 Violations.

23.10.205.1 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.

23.10.205.2 Notice of violation. The building 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.

23.10.205.3 Prosecution of violation. If the notice of violation is not complied with promptly, the building official is authorized to request the legal counsel of the jurisdiction 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.

Section 23.10.206 Stop Work Order.

23.10.206.1 Authority. Whenever the building 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 is authorized to issue a stop work order.

23.10.206.2 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 cease. The stop work order shall state the reason for the order, and the conditions under which the cited work shall be permitted to resume.

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

Section 23.10.207 Penalties and Remedies.

23.10.207.1 Violation penalties. Any person violating a provision of this code or failing to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.

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

23.10.207.3 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 thirty (30) days written notice to the municipal official or department empowered to enforce the provision, may 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.

CHAPTER 3 PERMITS AND INSPECTIONS**Section 23.10.301 Permits.**

23.10.301.1 Permits required. Any owner or authorized agent intending to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter,

1 repair, remove, convert or replace any electrical, gas, mechanical or
2 plumbing system, the installation of which is regulated by this code, or to
3 cause any such work to be done, shall first make application to the building
4 official and obtain the required permit.

5
6 **23.10.301.1.1 Emergency repairs.** Where equipment
7 replacements and repairs must be performed after hours in an
8 emergency situation, the contractor shall call the Building Safety
9 Hotline before commencing the work. The permit application shall
10 be submitted within the next working business day to the building
11 official.

12
13 **23.10.301.2 Work exempt from permit.** Exemptions from permit
14 requirements of this code shall not be deemed to grant authorization for
15 work to be done in any manner in violation of the provisions of this code or
16 any other laws or ordinances of this jurisdiction.

17
18 **23.10.301.2.1 Building permits.**

19
20 A. A building permit shall not be required for the following:

- 21
22 1. One-story detached accessory buildings used as tool
23 and storage sheds, playhouses, and similar uses,
24 provided the floor area does not exceed 120 square
25 feet.
26 2. Fences not over eight feet high.
27 3. Oil derricks.
28 4. Retaining walls up to four (4) feet in height measured
29 from the bottom of the footing to the top of the wall,
30 unless supporting a surcharge or impounding Class I,
31 II or III-A liquids.
32 5. Water tanks supported directly upon grade, if the
33 capacity does not exceed 5,000 gallons and the ratio
34 of height to diameter or width does not exceed 2:1.
35 6. Platforms, walks and driveways not more than 30
36 inches above grade and not over any basement or
37 story below.
38 7. Painting, papering, tiling, carpeting, cabinets,
39 countertops and similar finish work.
40 8. Temporary motion picture, television and theater
41 stage sets and scenery.
42 9. Prefabricated swimming pools accessory to a Group
43 R, Division 3 Occupancy, as applicable in section
44 101.2, less than 24 inches deep, do not exceed 5,000
45 gallons and installed entirely above ground.
46 10. Window awnings supported by an exterior wall which
47 do not project more than 54 inches (1372 mm) from
48 the exterior wall and do not require additional support
49 of Group R-3, as applicable in section 101.2 and
50 Group U occupancies.

11. Movable cases, counters and partitions not over 5 feet 9 inches high.
 12. Permits shall not be required for ordinary maintenance on a building or structure in Groups R-3 and U occupancies. Ordinary maintenance of a building or structure shall not include the cutting away or addition of any wall, partition or portion thereof, the removal of any structural beam or bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure; nor shall ordinary maintenance include additions to, alterations of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste vent or similar piping, electrical wiring, mechanical or other work affecting public health or safety. All ordinary maintenance shall be made only in accordance with the applicable provisions of the building code, and other construction or safety codes of the municipality.
 13. No building permit shall be required for nonstructural work up to and including \$5,000 total construction valuation, including the combination of all building construction, electrical, plumbing, mechanical and structural work. Total construction includes all work (as if contracted out) to complete the project and occupy the structure. This exemption does not affect the need for electrical, plumbing, mechanical and structural permits if electrical, plumbing, mechanical or structural work is done.
 14. Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.
 15. Swings and other playground equipment accessory to one- and two-family dwellings.
 16. Construction site job shacks.
 17. Storage racks not over six (6) feet high.
 18. Artwork six (6) or less feet tall.
 19. Grave markers.
 20. Roof antennas not mechanically anchored where the existing roof structure and stability are checked by a civil engineer licensed in the State of Alaska.
- B. Unless otherwise exempted by this code, separate plumbing, electrical and mechanical permits shall be required for the above exempted items.

23.10.301.2.2 Electrical permits.

- A. An electrical permit shall not be required for the following:

1. 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.
2. Repair or replacement of fixed motors, transformers or fixed approved appliances of the same type and rating in the same location.
3. Temporary decorative lighting.
4. Repair or replacement of current-carrying parts of any switch, contactor or control device.
5. Reinstallation of attachment plug receptacles, but not the outlets.
6. Repair or replacement of any overcurrent device of the required capacity in the same location.
7. Repair or replacement of electrodes or transformers of the same size and capacity in the same location.
8. Taping joints.
9. Removal of electrical wiring.
10. Temporary wiring for experimental purposes in suitable experimental laboratories.
11. Wiring for temporary theater, motion picture or television stage sets.
12. Low-energy power, controls and signal circuits of Class II and Class III as defined in the Electrical Code.
13. Installation, alteration or repair of electrical wiring, apparatus or equipment or 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.
14. 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.
15. Installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

23.10.301.2.3 Mechanical permits.

A. A mechanical permit shall not be required for the following:

1. A portable heating appliance.
2. Portable ventilating equipment.
3. A portable cooling unit.
4. A portable evaporative cooler.

5. A closed system of steam, hot or chilled water piping within heating or cooling equipment regulated by the Mechanical Code.
6. Replacement of any component part of assembly of an appliance which does not alter its original approval and complies with other applicable requirements of the technical codes.
7. Self-contained refrigeration system containing ten (10) pounds or less of refrigerant and actuated by motors of one (1) horsepower or less.

23.10.301.2.4 Plumbing permits.

A. A plumbing permit shall not be required for the following:

1. The stopping of leaks in drains, soil, waste or vent pipe, provided, however, should any concealed trap, drain pipe, soil, waste or vent pipe become defective and necessary to remove and replace the same with new material, the same shall be considered as new work and a permit shall be procured and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, nor for the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

23.10.301.3 Public service agencies. 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 agencies by established right.

Section 23.10.302 Application for permit.

23.10.302.1 Application.

A. To obtain a permit, the applicant shall first file an application in writing on a form furnished by the code enforcement agency. Every application shall:

1. Identify and describe the work covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description to readily identify and definitely locate the proposed building or work.
3. Indicate the use or occupancy for which the proposed work is intended.
4. Be accompanied by plans, diagrams, computations and specifications, and other data as required in section 302.2.
5. State the valuation of the proposed work.

6. Be signed by the owner, or the owner's authorized agent.
7. Give such other data and information as may be required by the building official.
8. If the work under application is an alteration to or construction of a privately owned residential structure of one to four units, used or intended to be used as a human dwelling, proof of a residential contractor endorsement issued by the State of Alaska shall be provided.

23.10.302.2 Submittal documents. Plans, specifications, engineering calculations, diagrams, soil investigation reports, special inspection and structural observation programs and other data shall constitute the submittal documents and shall be submitted in one or more sets with each application for a permit. When such plans are not prepared by an architect or engineer, the building official may require the applicant submitting the plans or other data to demonstrate state law does not require the plans be prepared by a licensed architect or engineer. The building official may require plans, computations and specifications to be prepared and designed by an engineer or architect licensed by the state of Alaska, even if not required by state law.

Exception: The building official may waive the submission of plans, calculations, construction inspection requirements and other data if it is found the nature of the work applied for is such that reviewing plans is not necessary to obtain compliance with this code.

23.10.302.3 Information on plans and specifications.

- A. Plans and specifications shall be drawn to scale on substantial paper or cloth and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail the work conforms to the provisions of this code and all relevant laws, ordinances, rules and regulations.
- B. Plans for buildings of other than Group R, Division 3 and Group U Occupancies 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.
- C. 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 occupancies in Groups R-2 and R-3, as applicable in section 101.2 and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.
- D. Construction documents for all buildings shall describe the exterior wall 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.

- 1 E. The construction documents shall include manufacturing
2 installation instructions that provide supporting documentation the
3 proposed penetration and opening details described in the
4 construction documents maintain the weather resistance of the
5 exterior wall envelope. The supporting documentation shall fully
6 describe the exterior wall system which was tested, where
7 applicable, as well as the test procedure used.
- 8 F. The construction documents submitted with the application for
9 permit shall be accompanied by a site plan showing, to scale, the
10 size and location of new construction and existing structures on the
11 site, distances from lot lines, the established street grades and the
12 proposed finished grades; and shall be drawn in accordance with an
13 accurate boundary line survey. In the case of demolition, the site
14 plan shall show construction to be demolished and the location and
15 size of existing structures and construction remaining on the site or
16 plot. The building official is authorized to waive or modify the
17 requirements for a site plan when the application for permit is
18 alteration or repair or when otherwise warranted.
19

20 **23.10.302.4 Architect or engineer of record.**

21 **23.10.302.4.1 General.**

- 22 A. When documents are required to be prepared by an architect
23 or engineer, the building official may require the owner to
24 engage and designate on the building application an
25 architect or engineer to act as the architect or engineer of
26 record. If the circumstances require, the owner may
27 designate a substitute architect or engineer of record to
28 perform all the duties required of the original architect or
29 engineer of record. The building official shall be notified in
30 writing by the owner if the architect or engineer of record is
31 changed or is unable to continue to perform the duties.
- 32 B. The architect or engineer of record shall be responsible for
33 reviewing and coordinating all submittal documents
34 prepared by others, including deferred submittal items, for
35 compatibility with the design of the building.
36

37 **23.10.302.4.2 Deferred submittals.**

- 38 A. For the purpose of this section, deferred submittals are
39 defined as those portions of the design not submitted at the
40 time of the application and which shall be submitted to the
41 building official within a specified period.
- 42 B. Deferral of any submittal items shall have prior approval of
43 the building official. The architect or engineer of record
44 shall list the deferred submittals on the plans and shall
45 submit the deferred submittal documents for review by the
46 building official.
- 47 C. Submittal documents for deferred submittal items shall be
48 submitted to the architect or engineer of record to review

1 them and forward them to the building official with a
2 notation indicating the deferred submittal documents have
3 been reviewed and found to be in general conformance with
4 the design of the building. The deferred submittal items
5 shall not be installed until the design and submittal
6 documents are approved by the building official.
7

8 **23.10.302.5 Revising application (removing permittee).** In order to
9 remove the permittee on a specific permit from responsibility of
10 completing a project and obtaining a Certificate of Occupancy, Building
11 Safety Form "Formal Transfer of Responsibilities at Time of C.C.O." shall
12 be completed and signed by the Owner and permittee being removed.
13

14 **23.10.302.6 Amended construction documents.** Work shall be installed
15 in accordance with the approved construction documents, and any changes
16 during construction not in compliance with the approved construction
17 documents shall be resubmitted for approval as an amended set of
18 construction documents.
19

20 **Section 23.10.303 Permits issuance.**

21 **23.10.303.1 Issuance.**

22 A. The application, plans, specifications, computations and other data
23 filed by an applicant for permit shall be reviewed by the building
24 official. Such plans may be reviewed by other departments of this
25 jurisdiction to verify compliance with any applicable laws under
26 their jurisdiction. If the building official finds the work described
27 in an application for a permit and the plans, specifications and other
28 data filed conform to the requirements of this code, the technical
29 codes, and other pertinent laws and ordinances, and all permit fees
30 have been paid, the building official shall issue a permit to the
31 applicant.
32

33 **Exceptions:**

- 34 1. The building official may require a permittee to obtain a
35 Certificate of Occupancy for a previous permit with an
36 expired Conditional Certificate of Occupancy prior to issuing
37 another permit.
- 38 2. The building official may require a permittee to reopen an
39 expired permit and obtain a Certificate of Occupancy or
40 Certificate of Completion for the expired permit prior to
41 issuing another permit.
- 42 3. The building official may require a permittee to remedy a
43 Stop Work Order, Notice of Violation, or Notice of Permit
44 Requirement on a permittee's other project or permit prior to
45 issuing another permit.
- 46 4. The building official may require a permittee to remedy a
47 drainage problem on permittee's previous expired or
48 unexpired permit prior to issuing another permit.

5. The building official may require a permittee to remedy water accumulation in a crawlspace of a previous permit prior to issuing another permit.

B. When a permit is issued and plans are required, the building official shall endorse in writing or stamp the plans and specifications APPROVED. Such approved plans and specifications 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.

C. 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 a partial permit shall proceed without assurance the permit for the entire building, structure or building service will be granted.

23.10.303.1.2 Small electrical projects.

A. Small electrical projects not requiring a building permit and meeting the requirements of the Work Authorization Program may be performed after completion of a Work Authorization form. Use of this program is not mandatory, and an installer may choose to purchase an electrical permit.

B. In general, this work is limited to the following amount:

1. Up to six outlets on a single new 20 ampere circuit; or
2. Up to six outlets added to an existing 20 ampere circuit; or
3. Up to 1-30 amp dedicated circuit; or
4. Mast or riser extensions, overhead to underground riser changes, and repairs to service meter/ disconnect equipment.

C. With prior approval of the electrical inspector, up to two forms may be used per project. Each reinspection shall require the use of an additional form. See, Municipality of Anchorage Handout E.02, Small Electrical Permit, for further requirements.

23.10.303.2 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. 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 during the work authorized thereby is in progress.

1 **23.10.303.3 Validity of permit.** The issuance or granting of a permit shall
2 not be construed to be a permit for, or an approval of, any violation of any of
3 the provisions of this code or of any other ordinance of the jurisdiction.
4 Permits presuming to give authority to violate or cancel the provisions of this
5 code or other ordinances of the jurisdiction shall not be valid. The issuance of
6 a permit based on construction documents and other data shall not prevent the
7 building official from requiring the correction of errors in the construction
8 documents and other data. The building official is also authorized to prevent
9 occupancy or use of a structure in violation of this code or of any other
10 ordinances of this jurisdiction.
11

12 **23.10.303.4 Expiration.**

13 A. Every permit issued by the building official under the provisions of
14 the technical codes shall expire by limitation and become null and
15 void, if the building or work authorized by the permit is not
16 commenced within 360 days from the date of the permit, or if the
17 building or work authorized by the permit is suspended or abandoned
18 at any time after the work is commenced for a period of 360 days.
19 For the purposes of this section, work shall be deemed suspended or
20 abandoned if no inspections have occurred within 360 days. Before
21 such work may be recommenced, a new permit shall be first obtained
22 to do so, and the fee therefore shall be one of half the amount required
23 for a new permit for such work, provided no changes have been made
24 or will be made in the original plans and specifications for such work;
25 and provided further such suspension or abandonment has not
26 exceeded 18 months, unless otherwise approved by the building
27 official. In order to renew action on a permit abandoned or
28 suspended more than 18 months, the permittee shall pay a new full
29 permit fee, unless otherwise approved by the building official.

30 B. A permittee holding an unexpired permit may apply for an extension
31 of the time within which work may commence under the permit when
32 the permittee is unable to commence work within the time required
33 by this section for good and satisfactory reasons. The building
34 official may extend the time for action by the permittee for a period
35 not exceeding 360 days upon written request by the permittee
36 showing circumstances beyond the control of the permittee prevented
37 action from being taken. Permits shall not be extended more than
38 once.

39 C. Grading permits in residential zoned areas shall be completed within
40 two (2) years of permit issuance. Once a grading permit expires, a
41 stop work order shall be issued, investigative fees shall be paid to
42 reactivate the permit, and a bond posted. The bond shall be no less
43 than the valuation to complete the work. The bond shall be forfeited
44 if work is not completed within 180 days.
45

46 **23.10.303.5 Suspension or revocation.** The building official may, in
47 writing, suspend or revoke a permit issued under the provisions of this code
48 and the technical codes when the permit is issued in error or on the basis of
49 incorrect information supplied, or in violation of an ordinance or regulation or
50 the provisions of these codes.

23.10.303.6 Licensing and qualifications.

- A. No permit shall be issued to any person to do or cause to be done any work regulated by this code, except to a person holding a valid, unexpired, and unrevoked contractor's certificate of qualification or registration as required by this code, except as otherwise provided in this section.
- B. A permit may be issued to a properly licensed person not acting in violation of any current contract licensing law.
- C. Any permit required by this code may be issued to any person to do any work regulated by this code in a single-family or duplex dwelling used exclusively for living purposes, including the usual accessory buildings and quarters in connection with such buildings, in the event such person is the legal owner of such dwelling and accessory buildings and quarters, and the same are occupied by said owner, provided said owner shall personally perform all labor in connection therewith.

23.10.303.6.1 Definitions.

Building construction contractor is a person who undertakes to perform any part of the construction, reconstruction, alteration, repair, building, highway, road, railroad, excavation, or other structure, project, development, or improvement, including the erection of scaffolding, electric signs, marquees, or other similar structures for which a condition, rule, regulation, or standard is prescribed by the Building Code as adopted and amended by this code. "Building construction contractor" includes those contractors generally classed as mechanical, general, or electrical contractors. "Building construction contractor" does not include regular employees of a building code contractor licensed under this section or a person who, as owner of a building or structure, performs work on the building or structure for his own use and benefit that would otherwise subject him to the licensing requirement of this section.

Electrical contractor is a person who may obtain electrical permits and install electrical wiring and equipment in industrial, commercial or residential categories.

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, shall not be able to obtain permits, and shall be employed by a Municipality of Anchorage licensed electrical contractor. 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

1 electrical residential wireman shall possess a residential wireman
2 certificate of fitness issued by the State of Alaska, shall not be able
3 to obtain permits, and shall be employed by a Municipality of
4 Anchorage licensed electrical contractor. A residential wireman is
5 limited to residential occupancies providing no more than four
6 residential units on a common foundation and may supervise up to
7 two trainees.

8
9 **Electrical trainee** is a person employed by an electrical contractor
10 to learn the electrical trade on the job and shall possess an
11 Electrician Trainee Certificate of Fitness issued by the State of
12 Alaska. Trainees may work only when under the direct supervision
13 of a journeyman or wireman, and no more than two trainees may be
14 assigned to a journeyman.

15
16 **Gas certificate holder** may install gas piping and gas equipment,
17 and may also service said equipment, but shall not be issued
18 permits.

19
20 **Gas piping contractor** certificate holder may install and repair gas
21 piping, install and repair gas equipment and obtain permits for such
22 work.

23
24 **Hydronic heating contractor** certificate holder may obtain permits,
25 install, and repair hydronic heating equipment.

26
27 **Hydronic heating journeyman** is a person who labors at the trade of
28 hydronic heating as an employee. A journeyman hydronic heating
29 certificate holder may install and repair hydronic heating equipment.

30
31 **Plumbing contractor** certificate holder may obtain permits, install or
32 repair plumbing, gas piping and mechanical equipment.

33
34 **Plumbing journeyman** is a person who labors at the trade of
35 plumbing as an employee. A journeyman plumber certificate holder
36 may install plumbing, gas piping and mechanical equipment.

37
38 **Refrigeration contractor** certificate holder may obtain permits,
39 install, and repair refrigeration equipment.

40
41 **Refrigeration journeyman** is a person who labors at the trade of
42 refrigeration as an employee. A journeyman refrigeration certificate
43 holder may install and repair refrigeration equipment.

44
45 **Residential electrical contractor** may obtain permits to install
46 electrical wiring and equipment in residential buildings up to four
47 units on a single foundation.
48

1 **Service station piping contractor** certificate holder may obtain
2 permits, install, and repair service station equipment, i.e., tanks,
3 pumps, fuel piping, etc.
4

5 **Service station piping journeyman** is a person who labors at the
6 trade of service station piping as an employee. A journeyman
7 service station piping certificate holder may install and repair
8 service station equipment, i.e., tanks, pumps, fuel piping, etc.
9

10 **Sewer or sewage disposal contractor** is a person who may conduct,
11 carry on or engage in the business of installing, altering or repairing
12 sewers and private sewage disposal systems.
13

14 **Sheetmetal contractor** certificate holder may obtain permits, install or
15 repair mechanical equipment, i.e., HVAC equipment, duct work and
16 venting of appliances.
17

18 **Sheetmetal journeyman** is a person who labors at the trade of sheet
19 metal as an employee. A journeyman sheet metal certificate-holder
20 may install and repair mechanical equipment, i.e., HVAC equipment,
21 duct work, and venting of appliances.
22

23 **Trainee** is a person, other than a contractor or journeyman, who
24 labors at the trade as an employee. The trainee shall be under the
25 direct supervision and in the immediate presence of a contractor or
26 journeyman. The trainee shall be a certificate holder of a valid
27 Municipality of Anchorage Trainee card.
28

29 **23.10.303.6.2 General provisions.**

- 30 A. It shall be unlawful for any person to conduct, carry on or
31 engage in the business of, or act in the capacity of a contractor
32 in a trade covered by this code without first being issued a valid
33 contractor's license or certificate of qualification/fitness.
34 B. An applicant for a building construction contractor's license
35 shall file a copy of the construction contractor's bond required
36 by state law with the application and shall show proof the
37 bond is current and in effect.
38 C. It shall be unlawful for any person to labor at a trade in the
39 capacity of a journeyman in a trade covered by this code
40 without first being issued a valid journeyman certificate of
41 qualification/fitness.
42 D. Any contractor or journeyman doing sheet metal or plumbing
43 work covered by this code shall be required to be tested and
44 licensed.
45 E. It shall be unlawful for any person to labor at a trade covered
46 by this code as a trainee without being issued a valid trainee
47 certificate of registration.
48 F. It shall be unlawful for any person acting in the capacity of a
49 contractor in a trade covered by this code, or as the responsi-
50 ble agent, manager, supervisor, superintendent or foreman, to

1 knowingly or willfully order, instruct or permit an employee,
2 agent or person under supervision or control to do an act
3 violating the certificate of qualification or registration
4 requirements set forth in subsections C or E.

- 5 G. The ratio of individuals holding trainee registration cards shall
6 not be more than two for every certified journeyman on a job
7 site.
8

9 **23.10.303.6.3 Application for certificate of qualification or**
10 **registration.**

- 11 A. Every person required to obtain a certificate of qualification
12 who successfully passes the required test shall, within thirty
13 (30) days of passing the test, obtain such certificate by paying
14 a fee.
- 15 B. Every person required to obtain a trainee certificate of
16 registration shall provide the information required on the
17 registration application form and pay a fee.
- 18 C. Each applicant, other than an individual, shall designate a
19 supervisory member as the responsible managing employee
20 (RME) to take the required examination and who shall be
21 designated as administrator under the license. No person
22 shall qualify as administrator under more than one license. If
23 the relationship of the administrator with the firm or
24 corporation applicant is terminated, the license shall become
25 void within sixty (60) days unless another administrator is
26 qualified by proper authority. Licenses issued to applicants
27 are nontransferable.
- 28 D. Applicants for plumbing or sheetmetal contractors' certificates
29 shall prove they have at least six years (12,000 hours minimum)
30 of previous practical experience. Credit may be allowed for
31 each year, and fraction thereof, of attendance at a recognized
32 school, if the course taken by the applicant was primarily
33 mechanical and directly related to the particular skill or trade
34 being applied for. No credit shall be allowed any applicant for
35 experience gained while doing any mechanical work ordinarily
36 incidental to or associated with non-mechanical occupations, as
37 determined by the building official.
- 38 E. Applicants for journeyman certificates shall prove they have
39 at least four (4) years (8,000 hours minimum) of previous
40 experience personally installing, fabricating, altering and
41 repairing work covered by the particular skill or trade being
42 applied for. In lieu of previous practical experience, credit
43 may be allowed for each year, and fraction thereof, of
44 attendance at a recognized school if the course taken by the
45 applicant was primarily mechanical and directly related to the
46 skill or trade being applied for. No credit shall be allowed
47 any applicant for experience gained while doing any work
48 ordinarily incidental to or associated with non-mechanical
49 occupations as determined by the building official. In lieu of
50 the above qualifications, an applicant may submit proof of

successful completion of at least a four-year (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.

- F. Applicants for a trainee certificate do not need prior experience, but shall prove they are working for a properly certified contractor.
- G. Applicants for a journeyman gas fitter's license shall prove two years' (4,000 hours minimum) previous experience in the gas piping field.

23.10.303.6.4 Issuance of certificate of qualification or registration.

- A. A sheetmetal, plumbing, or gas piping contractor's certificate of qualification shall be issued to every person who makes application for such certificate, pays the required fee, proves required experience and training and successfully passes the examinations.
- B. A sheetmetal, plumbing, or gas fitter journeyman's certificate of qualification shall be issued to every person who makes application for such certificate, pays the required fee, proves required experience and training and successfully passes the examinations.
- C. All other contractor and journeyman certificates of qualification for refrigeration, hydronic heating, and service station piping trades shall be issued to every person who makes application, proves the required experience and training, and pays the required fee.
- D. A trainee certificate of registration shall be issued to every person who makes application for such certificate and pays the required fee.
- E. A specialty contractor's certificate of qualification or registration shall be issued to every person who makes application for such certificate, pays the required fee, proves required experience and training, and successfully passes the examinations.
- F. A backflow assembly tester certificate of qualification or registration shall be issued to every person who makes application for such certificate, pays the required fee, attends the four-day Backflow Assembly Certification class sponsored by the Municipality of Anchorage Building Safety Division, and successfully passes both the written and the hands-on examination.
- G. In lieu of the above, an applicant may submit proof of attendance of a similar class as described in subsection A above, and of successfully passing the required examination(s) of the similar class, provided further the similar class is recognized as equal to the requirement(s) of subsection A above, as determined by the building official.

- 1 H. Each person who holds a valid certificate of qualification or
2 registration as a Backflow Assembly Tester shall attend an 8-
3 hour Re-certification class and successfully pass both the
4 written and the hands-on examinations every three (3) years
5 from the date of original issuance.
6 I. Every person required to have a certificate of qualification
7 shall obtain such certificate:
8 1. Within thirty (30) days of passing the required test; or
9 2. Within 30 days of the expiration date shown on the
10 certificate, except if the certificate has been
11 suspended or revoked.
12 J. Licenses issued under this title are valid for a maximum of
13 two (2) years, and expire on February 14 of each calendar
14 year.
15

16 **23.10.303.6.5 Re-Examination.**

- 17 A. Any person who fails to pass the examination may apply for
18 reexamination on the next available test date.
19 B. Fees for reexamination will be the same as initial examination
20 fees.
21

22 **23.10.303.6.6 Expiration of certificates of qualification or**
23 **registration.**

- 24 A. Every certificate of qualification or registration shall remain
25 in force and effect until its expiration date, unless canceled or
26 revoked.
27 B. Except for certificates of qualification which lapsed three or
28 more years past the expiration date, all certificates of
29 qualification and trainee registration cards expired beyond
30 thirty (30) days may be renewed by paying the prescribed fee.
31 This fee shall be retroactive to the expiration date of the last
32 certificate issued. In addition, an administrative late fee shall be
33 charged.
34 C. Certificates of qualification and trainee registration cards
35 shall not be allowed to lapse beyond thirty (30) days of the
36 expiration date without prior approval of the building official.
37 D. Certificates of qualification lapsing three or more years past
38 the expiration date of the last one issued shall not be renewed,
39 and the person shall be required to re-take the test required for
40 all new applicants.
41

42 **23.10.303.6.7 Revocation of certificates of qualification**
43 **or registration.**

- 44 A. The building official may cancel or revoke any certificate of
45 qualification or registration issued to any person, if such person
46 later shows incompetence or lack of knowledge in matters relevant
47 to such certificate or if such certificate was obtained by fraud. If
48 the certificate of qualification or registration of any person is
49 canceled or revoked, another certificate shall not be granted to the

person within twelve (12) months after the date of cancellation or revocation.

B. Certificates of qualification or registration are not transferable from one person to another, and the lending of any certificate or the obtaining of permits thereunder for any other person shall be deemed 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 this retesting shall result in revocation of the certificate. The person may apply for retesting after thirty (30) days have elapsed.

23.10.303.6.8 Certificate of fitness - right to inspection.

Municipal inspectors may contact any workman performing work for which a certificate of fitness is required (under AS 18.62.010) and request the person to exhibit his/her certificate of fitness. The inspector may immediately serve upon the person a notice to cease any further work in that occupation until he/she has displayed said State of Alaska certificate of fitness.

Section 23.10.304 Fees.

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

23.10.304.2 Permit fees.

- A. The fee for each permit shall be as set forth in section 23.10 Tables 3-A through 3-M. Where a technical code is adopted by the jurisdiction for which no fee schedule is shown in this code, the fee required shall be in accordance with the schedule established by the legislative body.
- B. The determination of valuation under the provisions of the code shall be based on the Building Valuation Data Chart in the most recent November/December issue of the Building Safety Journal as published by the International Code Council. The regional multiplier shall be 1.3. The rates in the November/December issue shall become effective on the following January 1st and continue to January 1st of the following year.
- C. The valuation shall be calculated using the dollar per square foot method as provided in the Municipality of Anchorage Handout #45, "Building Permit Fees." The area of the building for determination of building permit fees shall be the gross floor area. The gross floor area shall be the total horizontal area of all the floors of a building, measured between exterior faces of exterior walls, including interior balconies, mezzanines, stairwells, elevator shafts, ventilation shafts, etc., but excluding area without floor structure in atria.

- 1 D. Plumbing, mechanical and electrical permit fees shall be calculated
2 as a part of the plan review process. The fee assessment is to be
3 presented to the contractor for payment upon application for permit.
4

5 **23.10.304.3 Plan review fees.**

- 6 A. When a plan or other data are required to be submitted by subsection
7 302.2, plan review fee(s) shall be paid at the time of submitting plans
8 and specifications for review.
9

10 **Exception:** A Fire Department Plan Review fee is not required for
11 R-3 single family and two family dwellings.
12

- 13 B. The plan review fees specified in this section 304.3 are separate fees
14 from the permit fees specified and are in addition to the permit fees.
15 C. Where plans are incomplete or changed so as to require additional
16 plan review, an additional plan review fee shall be charged at the rate
17 shown in section 23.10 Tables 3-A through 3-M.
18 D. A plan review fee for plans submitted simultaneously or within the
19 current code cycle for identical structures within the same subdivision
20 or planned unit development (pre-approved plans) shall be charged
21 per section 23.10 Table 3.B. Each identical structure shall be issued a
22 separate building permit.
23

24 **23.10.304.4 Expiration of plan review.** Applications for which no permit
25 is issued within 360 days following the date of application shall expire by
26 limitation, and plans and other data submitted for review may thereafter be
27 returned to the applicant or destroyed by the building official. The building
28 official may extend the time for action by the applicant for a period not
29 exceeding 180 days, on written request by the applicant showing
30 circumstances beyond the control of the applicant prevented action from
31 being taken. An application shall not be extended if this code or any other
32 pertinent laws or ordinances are amended subsequent to the date of
33 application. In order to renew action on an application after expiration, the
34 applicant shall resubmit plans and pay a new plan review fee unless otherwise
35 approved by the building official.
36

37 **23.10.304.5 Investigation fees: work without a permit.**
38

39 **23.10.304.5.1 Investigation.** Whenever work for which a permit is
40 required by this code is commenced without first obtaining a permit, a
41 code compliance inspection may be required before a permit is issued
42 for such work.
43

44 **23.10.304.5.2 Fee.** When work is begun without proper permits, an
45 investigation fee at a rate shown in Table 3-N, in addition to the
46 permit fee, may be collected whether or not a permit is then or
47 subsequently issued. The payment of the investigation fee shall not
48 exempt an applicant from compliance with all other provisions of

either this code or the technical codes nor from the penalty prescribed by law.

23.10.304.6 Fee refunds.

- A. The building official may authorize refunding of a fee paid hereunder erroneously paid or collected.
- B. The building official may authorize refunding of not more than eighty percent (80%) of the permit fee paid when no work is done under a permit issued in accordance with this code.
- C. The building official may authorize refunding of one hundred percent (100%) of a plan review fee paid when an application for a permit with a plan review fee has been paid is withdrawn or canceled before any examination time is expended.
- D. The building official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee.

Section 23.10.305 Inspections.

23.10.305.1 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 purposes until approved by the building official. In addition, certain types of construction shall have continuous inspection as specified in section 306.
- 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 jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction 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 this jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.
- D. A survey of the lot may be required by the building official to verify the structure is located in accordance with the approved plans.
- E. A survey of a fill or excavation may be required by the building official to verify whether the work conforms to approved plans or code requirements.

23.10.305.2 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 in writing or by telephone at the option of the building official.
- B. It shall be the duty of the person requesting any inspections required either by this code or the technical codes to provide access to and means for inspection of the work.

23.10.305.3 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 of all buildings and structures when completed and ready for occupancy and use.

23.10.305.4 Required inspections. Refer to Building Safety Division Handout #1 "Inspection Schedule" for required inspections.

23.10.305.5 Other inspections. In addition to the called 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.

23.10.305.6 Reinspections.

- A. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.
- B. This section is not to be interpreted as requiring reinspection 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 reinspection.
- C. Reinspection 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.

Section 23.10.306 Special inspections.

23.10.306.1 General. Special inspection requirements shall be in accordance with International Building Code chapter 17.

Section 23.10.307 Structural observation.

23.10.307.1 General. Structural observation shall be in accordance with International Building Code section 1709.

Section 23.10.308 Connection to utilities.

23.10.308.1 Energy connections. Persons shall not make connections from a source of energy, fuel or power to building service equipment regulated by the technical codes and for which a permit is required by this code, until approved by the building official.

23.10.308.2 Temporary connections. The building official may authorize the temporary connection of building service equipment to the source of

energy, fuel or power for the purpose of testing building service equipment, or for use under a temporary Certificate of Occupancy.

Section 23.10.309 Certificate of occupancy.

23.10.309.1 Use or occupancy.

- A. Buildings or structures shall not be used or occupied nor shall a change in the existing use or occupancy classification of a 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 jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinance of the jurisdiction shall not be valid.

23.10.309.2 Change in use. Changes in the character or use of a building shall not be made except as specified in the Building Code.

23.10.309.3 Certificate issued.

- 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 submittal of an as-built survey as approved by the building official, the building official shall issue a Certificate of Occupancy containing the following:

- 1. The building permit number;
- 2. The address of the building;
- 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.

23.10.309.4 Conditional certificate.

- 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 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 August 15 of the following summer season.
- C. Expired conditional certificates may prevent the same permittee from receiving additional permits, as outlined in section 303 of this code.

23.10.309.5 Revocation. The building official may, in writing, suspend or revoke a 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.

23.10. Table 3-A Building permit fees.

1. Total Valuation	Building Permit Fee
\$1.00 to \$500.00	\$22.00
\$501.00 to \$2,000.00	\$22.00 for the first \$500.00 plus \$2.00 for each additional \$100.00 or fraction thereof, to and including \$2,000.00.
\$2,001.00 to \$25,000.00	\$52.00 for the first \$2,000.00 plus \$10.00 for each additional \$1,000.00 or fraction thereof, to and including \$25,000.00.
\$25,001.00 to \$50,000.00	\$282.00 for the first \$25,000.00 plus \$9.00 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00.
\$50,001.00 to \$100,000.00	\$507.00 for the first \$50,000.00 plus \$7.00 each additional \$1,000.00 or fraction thereof, to and including \$100,000.00.
\$100,001.00 to \$500,000.00	\$857.00 for the first \$100,000.00 plus \$4.50 each additional \$1,000.00 or fraction thereof, to and including \$500,000.00.
\$500,001.00 and up	\$2,657.00 for the first \$500,000.00 plus \$4.00 for each additional \$1,000.00 or fraction thereof.

2. Miscellaneous Building Permits		
A.	Permanent flexible fabric structures, per square foot	\$17.00
B.	Temporary/seasonal building	\$500.00
C.	Demolition	\$100.00

23.10. Table 3-B Plan review fees

1. Building Permits	
A. Building plan review	65% of the building permit fee as shown in Table 3-A
B. Fire Department plan review	25% of the building permit fee as shown in Table 3-A
C. Pre-approved plan	60% of the full plan review fee
D. Land use plan review	15% of building permit fee as shown in Table 3-A
E. Expedited plan review	60% of the building permit fee as shown in Table 3-A in addition to the applicable fee under A. through D., above
2. Electrical, Mechanical, Plumbing Permits	
A. Permit fee between \$1.00 to \$500.00	\$69.00
B. Permit fee between \$501.00 to \$1,000.00	\$117.00
C. Permit fee between \$1,001.00 to \$2,000.00	\$195.00
D. Permit fee between \$2,001.00 and \$3,000.00	\$293.00

E. Permit fee between \$3,001.00 and \$4,000.00	\$391.00
F. Permit fee between \$4,001.00 and \$6,000.00	\$489.00
G. Permit fee greater than \$6,000.00	\$587.00
3. Grading/Excavation/Fill Permits	
A. Between 1 and 50 cubic yards	No fee
B. Between 51 and 100 cubic yards	\$69.00
C. Between 101 and 1,000 cubic yards	\$99.00
D. Between 1,001 and 10,000 cubic yards	\$135.00
E. Between 10,001 and 100,000 cubic yards	\$135.00 first 10,000 cubic yards, plus \$69.00 each additional 10,000 cubic yards or fraction thereof
F. Between 100,001 and 200,000 cubic yards	\$744.00 first 10,000 cubic yards, plus \$42.00 each additional 10,000 cubic yards or fraction thereof
G. Greater than 200,001 cubic yards	\$1,149.00 first 10,000 cubic yards, plus \$18.00 each additional 10,000 cubic yards or fraction thereof
4. Miscellaneous	
A. Plan review or code research, change orders, miscellaneous, per hour, quarter-hour minimum	\$115.00
B. Product/fabricator approval review, per hour, two-hour minimum	\$115.00
C. Out-sourcing plan review	25% of the building permit fee

23.10. Table 3-C Inspection Fees

1. Inspector, per hour, minimum one hour	\$115.00
2. Inspection, unscheduled, each, per hour	\$145.00
3. Inspection outside normal business hours, per hour, per inspector; two-hour minimum	\$175.00
4. Inspection, Sundays and holidays, per hour, per inspector, two-hour minimum	\$230.00
5. Reinspection, per hour, per inspector, one-hour minimum	\$175.00
6. Reinspection, unscheduled, each, per hour	\$200.00
7. Reinspection, outside normal business hours, per hour, per inspector, two-hour minimum	\$230.00
8. Code compliance inspection, per hour, per inspector, one-hour minimum	\$115.00
9. Fine for failure to perform special inspection, per incident	\$230.00
10. Research, per hour, one-hour minimum	\$115.00

23.10. Table 3-D Electrical permit fees

1. New Buildings or Additions	
A. Single family and duplexes (R-3)	.0015 (\$1.50 per \$1,000) of construction valuation, with a minimum \$150.00
B. R-1 occupancies, multi-	\$195.00

family dwellings, each unit	
C. All other new buildings or additions:	
i. \$0.00 to \$55,000.00	\$115.00
ii. \$55,000.00 to \$500,000.00	\$2.00 per \$1,000.00
iii. Over \$500,000.00	\$1,035.00 + \$0.85 per \$1,000.00 > \$500,000.00
2. Work Other Than New or Added Square Footage, All Occupancies	
A. 1 to 250 outlets	\$109.00 + \$3.00 per outlet
B. 251 to 500 outlets	\$167.00 + \$3.00 per outlet
C. 501 to 1,000 outlets	\$265.00 + \$3.00 per outlet
D. 1,001 to 1,500 outlets	\$380.00 + \$3.00 per outlet
E. 1,501 to 2,000 outlets	\$512.00 + \$3.00 per outlet
F. 2,001 to 3,000 outlets	\$633.00 + \$3.00 per outlet
G. 3,001 or more outlets	\$748.00 + \$3.00 per outlet

“Outlet” for the purpose of defining permit fees is an outlet that supplies, stores, measures, controls, transforms, utilizes or provides ready access for connection to electrical power.

Examples: A generator, battery-powered emergency light, wall switch, any fire protection device, transformer, service meter, light fixture, receptacle, motor starter, combination motor starter/disconnect, exit sign, transfer switch, etc., are outlets for the purpose of permit fee calculation. A junction box or wireway is not considered an outlet for fee purposes.

3. Small Electric Permit, Municipality of Anchorage Handout E.02	\$46.00
4. Miscellaneous	
A. Replacement, upgrade or relocation of existing building electrical meter/disconnect service equipment	\$98.00
B. Retrofit of electrical equipment:	\$98.00
C. Temporary services:	
i. Single phase 220 volt 200 amperes or smaller, per inspection	\$46.00
ii. Over 200 amperes (includes transformers, panel boards, and branch circuits used for temporary power on large projects)	\$98.00
D. Electrical sign connection within six feet of connection	\$46.00
E. Permanent flexible fabric structures, per square foot	\$1.75

23.10. Table 3-E Mechanical Permit Fees

1. New Buildings or Additions	
A. Issuance of each permit (not charged for single family/duplex)	\$23.00
B. Installation of a mechanical heating system including all attachments, per 1,000 input Btu or fraction thereof, up to and including 400,000 Btu (including burners in furnaces, direct-fired heaters, or unit heaters)	\$0.40 per 1,000 Btu
C. Installation of a mechanical heating system including all attachments, per 1,000 input Btu or fraction thereof over 400,000 Btu (including burners in furnaces, direct-fired heaters, or unit heaters).	\$0.30 per 1,000 Btu

D. Installation of a mechanical cooling or refrigeration system including all attachments, per 1,000 Btu or fraction thereof, up to and including 400,000 Btu.	\$0.40 per 1,000 Btu
E. Installation of a mechanical cooling or refrigeration system including all attachments, per 1,000 Btu or fraction thereof, over 400,000 Btu.	\$0.30 per 1,000 Btu
F. i. Installation of each ventilation fan, exhaust fan, or air handler for the first 2,000 CFM. Fire dampers and duct connectors are extra, as scheduled below.	\$8.00 for first 2,000 CFM
ii. Each additional 1,000 CFM or fraction thereof	\$3.00
G. Installation of each fume, or Class II hood	\$12.00
H. Installation of each commercial or industrial incinerator, or Class I hood	\$70.00
I. Installation of each fuel, waste oil, glycol, or other non-pressure tank not a part of a system for which a fee is already assessed	\$58.00
J. Fire damper, each	\$8.00
K. Listed ceiling radiation damper, each	\$3.00
NOTE: For installation of combination mechanical cooling/heating systems, fees shall be charged at the input, heating, or cooling, whichever is greater, in accordance with B. through E. above.	
L. For each duct connector, with or without a diffuser or grille	\$1.50
M. For each piece of equipment or system regulated by this code, including processes piping as defined in IMC, for which no fee is listed	The fee shall be by valuation in accordance with 23.10. Table 3-A.
N. New residential single-family/duplex	.00115 (\$1.15 per \$1,000.00) of construction valuation, with a minimum \$115.00
O. HRV heat-recovery ventilation system	\$8.00 per unit + \$1.50 per diffuser
P. Snow melt system, existing boiler	\$30.00 + \$11.00 pressure test
Q. Permanent flexible fabric structures, per square foot	\$1.75
R. Wood stove installation	\$46.00
2. Retrofit (Replacement) Fees	
A. Commercial permit fees for boilers, furnaces and A/C units shall be charged at 50% of the input Btu rating of the equipment installed	
B. Single family and duplex retrofit fee	\$86.00
C. Permit issuance, each boiler, furnace, air conditioning and air exchanger unit replaced	\$23.00
D. Winterization of hydronic system, each	\$46.00

(AO No. 2002-176, § 1, 1-1-03)

23.10. Table 3-F Plumbing permit fees

1. New Buildings or Additions	
A. Issuance of each permit (not charged for single family or duplex)	\$23.00
B. Plumbing fixture, each	\$6.00
C. Gas outlet, each	\$6.00
D. Commercial water heater over 200,000 Btu input, or fraction thereof, per 1,000 Btu, each	\$0.35 per 1,000 Btu
E. Water heater 200,000 Btu input or less, each	\$23.00
F. Plumbing alteration work, each outlet	\$6.00
G. Sprinkler systems (fire protection, or lawn & garden), per head	\$3.00
H. Floor or roof drains	\$6.00
I. Dishwasher	\$6.00
J. Special wastes, fixtures, sumps and tanks	\$6.00
K. Laundry tray or washer	\$6.00
L. Approved testable reduced pressure principal or double check valve back flow preventer	\$46.00
M. Temporary gas, minimum fee per outlet (not to exceed \$200.00)	\$75.00
N. Winterization of each potable water system	\$46.00
O. For each piece of equipment or system not regulated by this code, for which no fee is listed, the fee shall be by valuation in accordance with 23.10. Table 3-A.	
P. New single family/duplex	.00145 (\$1.45 per \$1,000.00) of construction valuation with a minimum \$145.00
Q. Test backflow preventer per hour	\$115.00
R. Permanent flexible fabric structures, per sf	\$1.75
2. Retrofit (Replacement) Fees	
A. Changes for repair or replacement of a water heater with an input of less than 200,000 Btu	\$46.00
B. Commercial permit fees for water heaters over 200,000 Btu's	50% of the input Btu rating

(AO No. 2002-176, § 1, 1-1-03)

1

2
3

23.10.Table 3-G Elevator, escalator, and dumbwaiter permit fees**NOTES:**

1. Each separately powered unit shall be considered a separate conveyance; applications and permits shall be issued accordingly.
2. Installation fees, including charges for electrical equipment installed in connection with any conveyance and such equipment shall not be subject to a separate electrical permit fee.

1. New Installations and Relocations	
A. Hydraulic elevators	\$430.00 \$52.00 per hoistway opening
B. Cabled geared & gearless elevator	\$805.00 + \$58.00 per hoistway opening
C. Residential elevators	\$345.00
D. Dumbwaiters, manual doors	\$155.00 + \$17.00 per hoistway opening
E. Dumbwaiters, power doors	\$155.00 + \$40.00 per hoistway opening
F. Escalators and moving walks	\$1,150.00 + width in inches + run in feet + vertical rise in feet × \$6.00
G. Handicap lifts (vertical & inclined)	\$265.00
H. Material lift	\$345.00 + \$35.00 for 2nd and additional level
I. Roped hydraulic	\$805.00 + \$58.00 per hoistway opening
2. Alterations and Repairs	
A. Handicap lifts (vertical & inclined)	\$132.00 + \$29.00 per \$1,000.00 valuation
B. Other elevators	\$173.00 + \$29.00 per \$1,000.00 valuation
C. Cosmetic alterations, with weight difference less than 5%	\$173.00 + \$29.00 per \$1,000.00 valuation
D. Cosmetic alterations, with weight difference greater than 5%	\$173.00 + \$29.00 per \$1,000.00 valuation
3. Annual Certificate of Inspection Fees	
A. Hydraulic elevators	\$167.00 + \$14.00 per hoistway opening greater than two
B. Cable elevators	\$173.00 + \$14.00 per hoistway opening greater than two
C. Sidewalk elevators	\$132.00
D. Hand-powered elevators	\$132.00
E. Dumbwaiters	\$132.00 + \$14.00 per hoistway opening greater than two
F. Escalators & moving walks	\$195.00
G. Handicap lifts (vertical & inclined)	\$126.00 + \$14.00 per hoistway opening greater than two
H. Material lift	\$144.00 + \$35.00 per hoistway greater than two
I. Altering or replacing door opening device	\$207.00
J. Escalator performance step index test	\$125.00

23.10. Table 3-H Grading permit fees

1. 50 cubic yards or less	\$69.00
2. 51 to 100 cubic yards	\$99.00
3. 101 to 1,000 cubic yards	\$99.00 for first 100 cubic yards, plus \$45.00 each additional 100 cubic yards, or fraction thereof
4. 1,001 to 10,000 cubic yards	\$504.00 for first 1,000 cubic yards, plus \$42.00 each additional 1,000 cubic yards, or fraction thereof
5. 10,001 to 100,000 cubic yards	\$882.00 for first 10,000 cubic yards, plus \$180.00 each additional 10,000 cubic yards, or fraction thereof
6. Greater than 100,001 cubic yards	\$2,502.00 for first 100,000 cubic yards, plus \$99.00 each additional 10,000 cubic yards, or fraction thereof

23.10. Table 3-I Mobile home permit fees

1. Set-up fee	\$200.00
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23.10. Table 3-J Swimming pool, spa and hot tub fees

1. Each permit issuance	\$23.00
2. Each swimming pool:	
A. Public pool	\$75.00
B. Private pool	\$52.00
3. Replacing filter	\$6.00
4. Replacing piping	\$6.00
5. Backwash receptor	\$6.00
6. Miscellaneous replacements	\$6.00
7. For each piece of equipment or system regulated by this code, for which no fee is listed, the fee shall be by valuation in accordance with 23.10, Table 3-A.	

23.10. Table 3-K Sign permit fees

1. Sign, other than electrical	\$40.00
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23.10. Table 3-L Licenses and testing fees

1. Test Fees	
A. Contractor testing fee	\$75.00
B. Journeyman testing fee	\$45.00
2. Issuance or Renewal Fees	
A. Contractor license, 2 years	\$288.00
B. Journeyman license, 2 years	\$100.00
C. Trainee license, 2 years	\$65.00
D. Administrative late fee	\$40.00

3. License Requirements.	
A. Backflow Assembly Tester, renewal fee (one-day recertification training required)	\$58.00

23.10. Table 3-M On-site services fees

1. Excavator certification	\$ 370.00
2. Certificate of on-site systems approval, single family	\$ 430.00
3. Separation distance waivers:	
a. Waiver, lot line	\$ 175.00
b. Waiver, well to tank	\$ 920.00
c. Waiver, well to field	\$1,150.00
d. Waiver, field to surface water	\$1,150.00
e. Waiver, tank to surface water	\$ 920.00
f. Waiver, well to public sewer	\$1,150.00
g. Waivers of setback requirements in chapters 15.55 and 15.65 not listed in current fee schedule	\$ 175.00
h. On-site wastewater disposal system construction permit, single family	\$ 460.00
i. On-site wastewater disposal system construction permit renewal	\$ 115.00
j. On-site wastewater permit exceptions	\$ 115.00
k. Well driller permit	\$ 230.00
l. Waste treatment equipment manufacturer (plan review & facility inspection)	\$ 800.00
m. Water well construction permit, single family	\$ 175.00
n. Sewer inspection	\$ 415.00
o. Well inspection	\$ 210.00
p. Sewer/well inspection	\$ 520.00
q. On-site water/wastewater rush approval	\$ 175.00
r. On-site/continuing education class, per person	\$ 60.00
s. On-site conditional approval	\$ 115.00
t. On-site code compliance re-inspection, per inspection, per hour, one hour minimum	\$ 115.00

23.10. Table 3-N Miscellaneous fees

1. Code books and publications	Cost
2. Appeal fee, Board of Building Regulation Examiners & Appeals, each	\$500.00
3. Research, building permit, per hour	\$35.00
4. Fine, building code violations, civil penalty	\$100.00 to \$500.00
5. Copies, standard 8-1/2"×11" page, each	\$0.30
6. Monthly permit list, customer picks up	\$6.00
7. Monthly permit list, mailed, annual subscription	\$115.00
8. Investigation fee for work begun without proper permit(s), in addition to permit fee, per permit	Permit fee required by this code, or \$1,000.00, whichever is greater
9. Training, per person, per class	\$50.00
10. Special inspection violation, per violation	\$150.00

11. Code abatement fee, per hour, one hour minimum	\$115.00
12. Fine (Contractor), work without a required contractor's license, civil penalty <ul style="list-style-type: none"> a. First Offense: Issuance fee plus test fee (if applicable) and a \$1000.00 fine which may be waived by the building official if required license is obtained within 30 days. b. Subsequent Offense: \$1000.00 plus issuance fee plus test fee (if applicable) and an additional \$1000.00 applied incrementally for each additional offense. As example, the third offense would be \$2000.00. 	
13. Fine (Journeyman), work without a required Certificate of Qualification <ul style="list-style-type: none"> a. First Offense: Issuance fee plus test fee and a \$250.00 fine which may be waived by the building official if the individual registers for the journeyman test within 72 hours. b. Subsequent Offense: \$250.00 plus issuance fee plus test fee and an additional \$250.00 applied incrementally for each additional offense. For example, a third offense is \$500.00. c. The contractor for whom the violator is working for shall be subject to the same fines as the violator. 	
14. Fine (Trainee), work without a required trainee card <ul style="list-style-type: none"> a. First Offense: \$60.00 (100 % shall be applied toward acquisition of a trainee card, if obtained within 72 hours). b. Subsequent Offense: \$100.00 plus issuance fee for each offense and an additional \$100.00 applied incrementally for each additional offense. For example, a third offense is \$200.00. c. The contractor for whom the violator is working for shall be subject to the same fines as the violator. 	

CHAPTER 23.15 LOCAL AMENDMENTS TO THE INTERNATIONAL BUILDING CODE 2006 EDITION

Sections

23.15.100	Local amendments to the International Building Code, 2006 Edition
23.15.103-115	Delete
23.15.202	"U" definitions
23.15.305.2	Day care
23.15.308.3	Group I-2
23.15.308.3.1	Child care facility
23.15.308.5	Group I-4, day care facilities
23.15.310.1	Residential Group R
23.15.406.1.4	Separation
23.15.421	Special security requirements for Group E buildings
23.15.422	Carbon monoxide detectors
23.15.501.3	Location on property
23.15.508.2	Table 508.2 incidental use areas
23.15.717.4.2	Groups R-1 and R-2
23.15.1003.1	Applicability
23.15.1008.1.8.6	Delayed egress locks

1	23.15.1019.1	Minimum number of exits
2	23.15.1026.1	General
3	23.15.1102	Definitions
4	23.15.1106	Parking and passenger loading facilities
5	23.15.1110.1	Signs
6	23.15.1203.2	Attic spaces
7	23.15.1210.1	Floors
8	23.15.1210.2	Walls
9	23.15.1211	Vapor retarders
10	23.15.1403.2	Weather protection
11	23.15.1404.2	Water-resistive barrier
12	23.15.1503	Weather protection
13	23.15.1507.2.2	Slope
14	23.15.1507.3.3	Underlayment
15	23.15.1507.3.3.1	Low slope roofs
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21	23.15.1609.3	Basic wind speed
22	23.15.1609.4.3	Exposure categories
23	23.15.1613.1	Scope
24	23.15.1613.2	Definitions
25	23.15.1704.1	General
26	23.15.1704.1.2	Report requirement
27	23.15.1704.1.3	Pre-construction special inspection meeting
28	23.15.1704.1.4	Special inspector pre-approval program
29	23.15.1704.1.4.1	Special inspector intern program
30	23.15.1704.1.4.2	Approval suspension
31	23.15.1704.1.4.3	Removal of pre-approved status
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36	23.15.1802.1	General
37	23.15.1802.2.3	Groundwater table
38	23.15.1802.2.6	Seismic design Category C
39	23.15.1802.2.7	Seismic design Category D, E, or F
40	23.15.1802.2.8	Permafrost
41	23.15.1802.4.1	Exploratory boring
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43	23.15.1802.6	Reports
44	23.15.1803.3	Site grading
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46	23.15.1805.1	General
47	23.15.1805.2.1	Frost protection
48	23.15.1805.2.4	Footing definitions
49	23.15.1805.3	Footings on or adjacent to slopes
50	23.15.1805.3.5	Alternate setbacks and clearance

1	23.15.1805.4.6	Wood foundations
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6	23.15.1807.1.3	Ground-water control
7	23.15.1807.2.2	Walls
8	23.15.1807.3	Waterproofing required
9	23.15.1808.2.8.3	Load tests
10	23.15.1808.2.23.2.1	Design details for piers, piles and grade beams
11	23.15.1905.12	Cold weather requirements
12	23.15.1907.5.1	Support
13	23.15.2104.6	Installation of anchors
14	23.15.2208.1	Storage racks
15	23.15.2308.9.2.2	Top plates for studs spaced at 24 inches
16	23.15.2308.9.8	Pipes in walls
17	23.15 Table 2902.1	
18	23.15.3004.3	Area of vents
19	23.15.3005.4	Personnel and material hoists
20	23.15.3006.1	Access
21	23.15.3006.5	Shunt trip
22	23.15.3007	Elevator sprinkler requirements
23	23.15.CH.34	Existing structures
24	23.15	Appendix
25	23.15.H.101.2	Signs exempt from permits
26	23.15.H.101.3	Permits required
27	23.15.H.101.4	Application for permit

23.15.100 Local amendments to the International Building Code, 2006 Edition

The amendments to the 2006 Edition of the International Building Code are listed hereafter by section. The last digits of the number (after the title and chapter digits) are the sections of the International Building Code to which the amendments refer.

23.15.103-115 Delete

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

23.15.202 "U" definitions

Add the following definition:

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

23.15.305.2 Day care

Amend first paragraph to read as follows:

The use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than

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

Add a new Exception to read as follows:

Exception: A child care facility located in a detached one-or two-family dwelling unit or townhouse (as defined in the International Residential Code) operating between the hours of 6:00 a.m. and 10:00 p.m. may accommodate a total of eight (8) children of any age without conforming to the requirements of this code for a group E occupancy. Such facilities shall comply with Anchorage Municipal Code Title 16.55, Child Care and Education Facilities – Centers and Homes. Smoke alarms, carbon monoxide detectors, and emergency escape and rescue openings shall be provided as required by the International Residential Code. Fire extinguishers shall be provided as required by the International Fire Code for a group E occupancy. Child care shall be limited to the basement, first and second stories. Child care facilities located in a basement or above the first story shall have access to not less than two means of egress separated by a minimum of ½ the maximum overall diagonal of the area served. One of the required means of egress may consist of a code compliant emergency escape and rescue opening. When child care facilities are located in a basement, at least one exit or emergency escape and rescue opening shall discharge directly to the exterior of the building at or near grade.

23.15.308.3 Group I-2

Amend the last sentence to read:

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

23.15.308.3.1 Child care facility

Amend paragraph to read:

A child care facility providing care on a 24-hour basis to more than five (5) children 2-1/2 years of age or less, including children related to the staff, shall be classified as Group I-2.

23.15.308.5 Group I-4, day care facilities

Amend the second sentence to read:

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

23.15.310.1 Residential Group R

Under R-3 occupancies delete:

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

Under R-3 Occupancies, add the following paragraph:

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

Under R-3 Occupancies, add the following paragraph:

A detached structure occupied as a single-family dwelling unit and containing not more than five guest rooms where guests pay rent in money, goods, labor, or otherwise shall be classified as a group R-3 occupancy, or shall comply with the International Residential Code. The total number of guests shall not exceed 50 square feet of net guest room floor area per occupant.

23.15.406.1.4 Separation

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

23.15.421 Special security requirements for Group E buildings

Amend Chapter 4 by adding a new section as follows:

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

23.15.422 Carbon monoxide detectors

Amend Chapter 4 by adding a new section 422 for carbon monoxide detectors, as follows:

422.1 Carbon monoxide detectors. The provisions of this section shall apply to Group I-1, R-2, R-3 R-4 occupancies and Group E daycare facilities. At least one (1) carbon monoxide detector shall be installed on each floor level. If a floor level contains bedrooms or sleeping rooms, at least one (1) detector shall be located in the immediate vicinity of the sleeping area, outside of the bedrooms/sleeping rooms. Carbon monoxide detectors shall be listed and installed in accordance with their listing. The alarm shall be clearly audible in all sleeping rooms with intervening doors closed.

Exceptions:

1. Carbon monoxide detectors are not required in dwelling units and structures with no combustion appliances and that do not have an attached garage.
2. Carbon monoxide detectors are not required in dwelling units and structures with only direct vent combustion appliances and that do not have an attached garage.

3. Carbon monoxide detectors are not required in Group I-1 and R-2 occupancies where all combustion equipment is located within a mechanical room separated from the rest of the building by construction capable of resisting the passage of smoke. If the structure has an attached parking garage, the garage shall be ventilated by an approved automatic carbon monoxide exhaust system designed in accordance with the mechanical code.

422.2 Interconnection. In new construction, all carbon monoxide detectors located within a single dwelling unit shall be interconnected in such a manner that actuation of one alarm shall activate all of the alarms within the individual dwelling unit.

422.3 Power source. In new construction, carbon monoxide detectors shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Wiring shall be permanent and without disconnecting switch other than those required for overcurrent protection. In existing construction, carbon monoxide detectors shall be permitted to be battery powered or cord-and-plug type with battery backup.

23.15.501.3 Location on property

Amend chapter 5 by adding a new section to read as follows:

501.3 Location on property. Buildings shall adjoin or have access to a permanent public way or yard on not less than one side. Required yards shall be permanently maintained.

23.15.508.2 Table 508.2 incidental use areas

Amend Table 508.2 by changing the wording in the first block under the left column to read as follows:

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

23.15.717.4.2 Groups R-1 and R-2

Amend Exception 3 to read as follows:

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

23.15.901 General

Add a new subsection to read as follows:

901.10 Damage protection. When exposed to probable vehicular damage due to proximity to alleys, driveways or parking areas, standpipes, post indicator valves and sprinkler system or standpipe system, connections, shall be protected in an approved manner.

23.15.903.2.2 Group E

Delete 903.2.2 and replace with the following:

An automatic sprinkler system shall be provided throughout all buildings that contain a Group E occupancy and for every portion of educational buildings below the level of exit discharge. The use of a fire wall does not establish a separate building for purposes of this section.

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

Daycare uses licensed to care for more than five (5) persons between the hours of 10 p.m. and 6 a.m. shall be equipped with an automatic sprinkler system designed and installed in accordance with subsection 903.3.1 or an approved equivalent system.

23.15.903.2.5 Group I

Delete exception and replace with:

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

23.15.903.2.7 Group R

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

Any Group R-4 occupancy meeting the requirements for construction as defined for group R-3 or constructed in accordance with the IRC shall be sprinklered according to the requirements of 903.3.1.2.

23.15.903.2.10.1 Stories and basements without openings

Amend paragraph by deleting the words:

“where the floor area exceeds 1,500 square feet and”

23.15.903.2.12 Other hazards

Amend by adding the following subsection:

903.2.12.3 Pit sprinklers. Sprinklers shall be installed in the bottom of all new and existing elevator pits below the lowest projection of the elevator car but no higher than 24” from the bottom of the pit.

23.15.903.3.1.1.1 Exempt locations

Amend by adding the following:

5. **Machine rooms, machine spaces, control rooms, and control spaces.** Sprinkler heads, non-elevator related equipment, and unrelated piping, shall not be installed in new and shall be removed from existing elevator machine rooms, machine spaces, control rooms, and control spaces.

23.15.903.3.5 Water supplies

Add a new subsection as follows:

903.3.5.3 Hydraulic calculations. Sprinkler system design shall include a minimum 15% safety factor for flow at the supply.

23.15.903.4.1 Signals

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

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

23.15.907.2.1 Group A

Delete Exception.

23.15.907.2.2 Group B

Delete Exception.

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 Manual fire alarm system

Delete Exception #2.

23.15.907.2.9 Group R-2

Amend first paragraph to read as follows:

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

Amend by deleting exception # 2.

23.15.1003.1 Applicability

Amend section by adding an exception to read as follows:

Exception: Stairs or ladders used only to attend equipment are not considered elements of the means of egress system.

23.15.1008.1.8.6 Delayed egress locks

Revise item number 3 to read as follows:

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

23.15.1019.1 Minimum number of exits

Amend section by adding an exception to read as follows:

Exception: Basements or the first level below the first story in all occupancies except R-3, used exclusively for the service of the building may have access to only one (1) exit. For any other use except R-3, the basement or first level below the first story shall have at least two (2) exits arranged in accordance with section 1015.2. For the purpose of this exception, storage rooms, laundry rooms, maintenance offices and similar uses shall not be considered as providing service to the building.

23.15.1026.1 General

Amend section 1026.1 by deleting all exceptions, except numbers 5 and 6.

23.15.1102 Definitions

Add the following definition:

Conventional industry tolerances means plus or minus ½ inch up to 36 inches and plus or minus 1 percent over 36 inches. Slopes may be plus or minus 1 percent.

23.15.1106 Parking and passenger loading facilities

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

23.15.1110.1 Signs

Delete Items 1 and 2 and replace with the following:

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

23.15.1203.2 Attic spaces

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

Amend third sentence by changing “1 inch” to “1 ½ inch.”

Amend section by deleting the exception in its entirety.

Add a sentence at the end of the paragraph to read as follows:

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

23.15.1210.1 Floors

Amend paragraph to read as follows:

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

23.15.1210.2 Walls

Amend first paragraph to read as follows:

Walls within two feet (610 mm) of the front and sides of urinals and water closets shall have a smooth, non-porous, non-absorbent surface such as non-cushioned sheet vinyl, sealed concrete, ceramic tile with sealed joints, approved plastic panels, or other approved materials, to a height of four feet (1219 mm) minimum.

23.15.1211 Vapor retarders

Amend by adding a new section 1211 titled Vapor Retarders:

1211.1 Vapor retarders. All exterior wall, ceiling, and roof assemblies that enclose heated space and that are exposed to outdoor ambient temperatures shall be protected against water vapor transmission. Assemblies not otherwise of impermeable construction shall have installed, on the heated side of the insulation or air spaces, vapor retarders having a perm rating of 0.06 minimum in accordance with ASTM E96 (equivalent to 6 mil polyethylene).

23.15.1403.2 Weather protection

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

Amend third sentence by deleting the words “as described in section 1404.2.”

23.15.1404.2 Water-resistive barrier

Delete “a minimum of one layer of No. 15 asphalt felt, complying with ASTM D 226 for Type 1 felt or” from the first sentence.

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.

23.15.1507.2.2 Slope

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

23.15.1507.3.3 Underlayment

Replace paragraph with the following:

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

23.15.1507.3.3.1 Low slope roofs

Delete section in its entirety.

23.15.1507.3.3.2 High slope roofs

Delete section in its entirety.

23.15. Table 1507.3.7 Clay and concrete tile attachment

Delete column titled "Roof slope up to < 3:12" in its entirety.

23.15.1604.4 Analysis

Add a paragraph after the last sentence:

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

23.15.1608.1 General

Add the following sentence:

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

23.15.1608.3 Flat roof snow loads

Add the following section 1608.3:

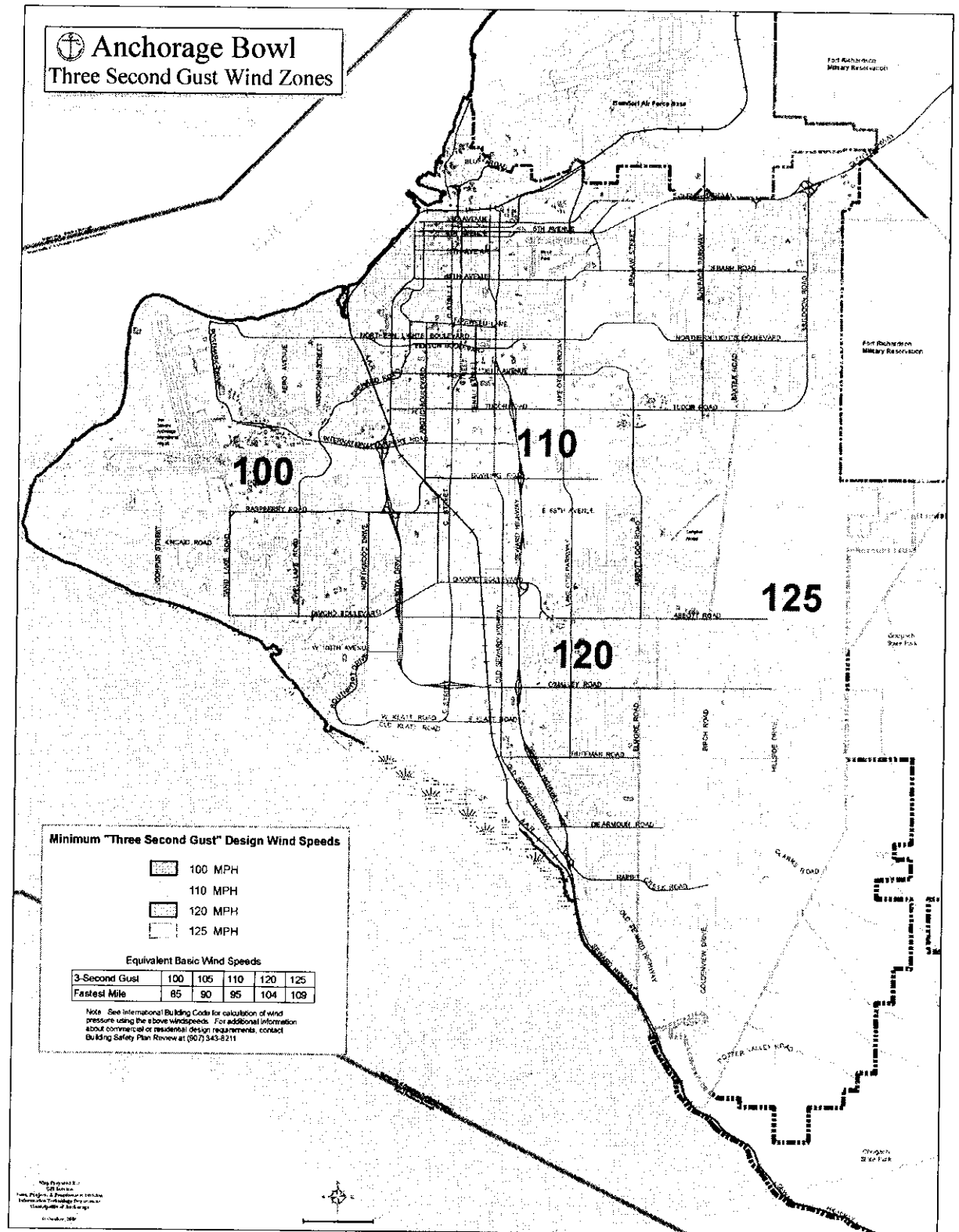
1608.3 The minimum flat roof snow load, P_f , shall be forty (40) pounds per square foot.

23.15.1609.3 Basic wind speed

Replace the first paragraph with the following:

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

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



23.15.1609.4.3 Exposure categories

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

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

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

23.15.1613.1 Scope

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

23.15.1613.2 Definitions

Add the following definition:

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

Zone 1 – "Lowest ground failure susceptibility."

Zone 2 – "Moderately low ground failure susceptibility."

Zone 3 – "Moderate ground failure susceptibility."

Zone 4 – "High ground failure susceptibility."

Zone 5 – "Very high ground failure susceptibility."

23.15.1704.1 General

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

Provided the Engineer of Record is a registered professional engineer in the State of Alaska, the Engineer of Record shall be deemed qualified to perform special inspections required under this chapter without further statements of qualifications or resumes to the Building Official.

23.15.1704.1.2 Report requirement

Delete the fourth and fifth sentences and insert the following:

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

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

23.15.1704.1.3 Pre-construction special inspection meeting

Add new subsection 1704.1.3 as follows:

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

23.15.1704.1.4 Special inspector pre-approval program

Add a new subsection 1704.1.4 to read as follows:

- A. Unless otherwise approved by the building official, special inspectors shall be pre-qualified and approved by the building official before performing special inspection activities on any project within the jurisdiction. Special inspectors shall obtain pre-approval for each category of inspection they wish to perform. Applicants for pre-approval as special inspectors shall submit an application describing documentable qualifications for each category of inspection(s) to be performed, with years of experience, project references, certifications where appropriate, and references with contact information. Once qualifications are accepted by the building official, an applicant special inspector shall be issued a unique special inspector number. Provisions may be made for pre-qualification of special inspector interns not meeting the basic requirements of a special inspector in a certain category, but who are supervised by a pre-qualified special inspector or design professional.
- B. Approval shall be by letter from the municipality and shall include a pocket or wallet card defining special inspector's information and the categories the special inspector has been pre-approved. Special inspectors shall carry the wallet card on their person when performing inspections and show the card upon request of building official's representative or designated design professional. Special inspector approvals shall be renewed every two (2) years by reapplication of the special inspector.

23.15.1704.1.4.1 Special inspector intern program

Add a new subsection 1704.1.4 to read as follows:

- A. The Special Inspection firm proposing to use an intern for part of their Special Inspection shall submit to the building official a

written Special Inspector Intern Program for approval. The program shall define:

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

23.15.1704.1.4.2 Approval suspension

Add a new subsection 1704.1.4.2 to read as follows:

The building official may suspend an individual's approval as a special inspector for a project where the special inspector demonstrates a lack of knowledge, neglects duties due to their own fault or falsifies documents. The special inspector shall be provided written notification and shall be afforded the opportunity by the building official to be heard. Decisions may be appealed to the Building Board of Appeals.

23.15.1704.1.4.3 Removal of pre-approved status

Add a new subsection 1704.1.4.3 to read as follows:

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

23.15.1704.1.5 Ad hoc special inspector peer committee

Add a new subsection 1704.5 to read as follows:

An advisory committee of special inspection peers may meet to provide guidance on special inspection matters including but not necessarily limited

to, special inspector qualifications, special inspection related code issues, special inspection requirements, remedies to disputes regarding special inspection duties and procedures, and special inspector approval program issues. The Ad Hoc Special Inspection Committee shall be comprised of a balanced membership of peers and shall include a balanced representation of the special inspection profession, design professionals, and public officials. The committee shall meet as required and shall be chaired by the building official or designee. Decisions by the building official may be appealed to the Building Board of Appeals. For a quorum, a peer committee requires attendance of individuals from four (4) businesses performing similar special inspections, and the building official.

23.15.1704.3 Steel construction

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

- 2.6. **Welds** listed under exception 2 shall not require Special Inspection if design stresses are less than half of the allowable stresses and welds are placed by AWS certified welders. The Engineer of Record shall indicate on the drawings which welds, if any, do not require Special Inspection.

23.15.1704.3.1 Welding

Add a new paragraph as follows:

For Special Moment-Resisting Frames, the Special Inspector shall be a qualified, AWS Certified Weld Inspector.

23.15.1704.4 Concrete construction

Add the following exception

6. Shotcrete work not of a structural nature or not for water retention structures, fully supported on earth, for minor repairs or when no special hazard exists and special inspection is waived by the building official.

23.15.1802.1 General

Delete the second sentence and replace with:

The classification and investigation of the soil shall be made by an Alaska registered civil engineer.

23.15.1802.2.3 Groundwater table

Replace the subsection with the following:

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

23.15.1802.2.6 Seismic design Category C

1 Add the following after the paragraph:

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

9
10 B. The level of evaluation shall be a function of the Occupancy
11 Category of the structure and its location relative to the mapped
12 Seismically-Induced Ground Failure Zones shown in the
13 Municipality of Anchorage 1980 Anchorage Coastal Resource
14 Atlas, Volume I.

15
16 C. Liquefaction: The evaluation of liquefaction potential for
17 Occupancy Category I and II structures located in Seismically-
18 Induced Ground Failure Zones 1, 2, or 3 may be based on historic
19 record. The evaluation of liquefaction potential for all Occupancy
20 Category III and IV structures, and for Occupancy Category I and II
21 structures located in Seismically-Induced Ground Failure Zones 4 or
22 5, shall follow an accepted empirical procedure. The potential for
23 liquefaction and soil strength loss shall be evaluated in terms of peak
24 ground acceleration, earthquake magnitude and duration.

25
26 D. Slope Stability & Lateral Spreading: Evaluations of slope stability
27 and surface rupture due to lateral spreading may be analyzed
28 following one of two methods defined below. All analyses shall
29 consider the potential loss of soil strength due to liquefaction, or due
30 to remolding of sensitive cohesive materials.

31
32 Method 1. Pseudo-Static Analysis: Following a Limit-
33 Equilibrium analysis, the building site and all natural,
34 permanent cut, fill, or stabilized slopes shall exhibit a
35 minimum factor of safety of 1.50 under static loading
36 conditions; and a minimum factor of safety of 1.10
37 for seismic loading conditions, when applying the
38 minimum horizontal inertia force determined by
39 multiplying the acceleration factor in Table
40 2315.1802.2.6 to the weight of the potential sliding
41 mass.

42
43 Method 2. Dynamic Analysis: The stability of the building site
44 and all natural permanent cut, fill or stabilized slopes
45 shall exhibit an acceptable safety factor or magnitude
46 of displacement under seismic loading following a
47 dynamic analysis. Dynamic analyses shall be based
48 on site-specific design ground motions defined in
49 Table 23.15.1802.2.6.

TABLE 23.15.1802.2.6
Seismic Horizontal Acceleration Factors

Method of Evaluation	Horizontal Acceleration Coefficient
1. Limit-Equilibrium: Zone ^(a) 1, 2, and 3	0.30
Zone ^(a) 4 and 5	0.20
2. Dynamic Analysis	Peak horizontal acceleration corresponding to a 475-year return period ground motion (in bedrock), as modified for the site conditions (Ref: Sections 1615.1 and 1615.2).

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

23.15.1802.2.7 Seismic design Category D, E, or F

In Item 2, delete the last two sentences. Delete the Exception.

23.15.1802.2.8 Permafrost

Add a new subsection 1802.2.8 to read as follows:

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

23.15.1802.4.1 Exploratory boring

Amend by replacing "registered design professional" with "Alaska registered Civil Engineer."

23.15.1802.5 Soil boring and sampling

Amend by replacing "registered design professional" at the end of the first sentence with "Alaska registered Civil Engineer."

23.15.1802.6 Reports

Amend by adding "by a civil engineer licensed in the State of Alaska" after "shall be submitted."

Add the following items after item 9:

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

23.15.1803.3 Site grading

Add the following paragraph to the end of the section:

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

Add the following paragraph to the end of the section:

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

23.15.1803.5 Compacted fill material

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

23.15.1805.1 General

Add the following at the beginning of the paragraph:

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

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

23.15.1805.2.1 Frost protection

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

Replace item 2 with:

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

Add the following at the end of the section:

Minimum footing depths shall be as indicated in Table 23.15.1805.2.1. Footings shall bear on undisturbed natural inorganic soil, or suitably compacted fill.

Cast-in-place concrete piers shall be founded at a depth suitable for structural support or as indicated in Table 23.15.1805.2.1, whichever is

greater. Connecting grade beams between piers on perimeter walls of warm buildings shall extend at least thirty-six (36) inches below ground surface and shall be protected from frost heave. The potential for frost heave below grade beams of cold structures shall be accounted for in the design of these elements.

Table 23.15.1805.2.1

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

Notes:

1. Dimension indicated is from bottom of footing to adjacent exterior grade. Required depth to bottom of footing within a crawl space shall not be less than eight (8) inches (203 mm). Basements or crawl space walls supporting more than five (5) feet (1524 mm) differential fill on opposite faces shall be restrained as necessary against lateral movement.
2. Dimension indicated is from bottom of footing to nearest adjacent grade.
3. Exterior decks, landings, and platforms not rigidly attached to the building and not greater than thirty (30) inches (762 mm) above grade may bear directly on the ground. Bearing materials shall meet other provisions of this code.
4. The minimum footing depths may not be adequate for frost susceptible soils. Cold footings shall be founded below the frost line, or be protected from freezing with insulation or other appropriate means. In addition, provisions shall be made to resist uplift forces due to frost jacking on the sides of cold foundations.
5. Foundations installed in non-frost-susceptible material may be sixty (60) inches (five feet) (1524 mm).
6. Non-load-bearing site structures not attached to the building, such as fences, light poles, sign posts, shall have a footing depth based on an analysis of the vertical and lateral loads on the structure and the structure's susceptibility to damage from frost action.

23.15.1805.2.4 Footing definitions

Add a new subsection 1805.2.4 as follows:

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

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

23.15.1805.3 Footings on or adjacent to slopes

Add the following paragraph before the first sentence:

When a foundation investigation is required in accordance with section 23.15.1802.2., the minimum building and structure clearances and setbacks shall be as defined in sections 1805.3.1 and 1805.3.2, or fifteen (15) feet (4572 mm) from the surface projection of the most critical theoretical failure plane determined from the slope stability analysis, whichever is greater.

23.15.1805.3.5 Alternate setbacks and clearance

Change “registered design professional” to “civil engineer registered in the State of Alaska.”

23.15.1805.4.6 Wood foundations

Add the following to the beginning of the first paragraph:

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

Add a second paragraph as follows:

Hot dipped zinc-coated fasteners may not be used for basement or crawl space construction. Fasteners and anchor bolts used in concrete footings shall be stainless steel. Anchor bolts shall be a minimum ten inch (10”) by 5/8-inch nominal diameter embedded at least seven (7) inches (178 mm) into the concrete. Treated wood foundation plates or sills shall be installed in accordance with section 23.15.1805.6.

23.15.1805.5 Foundation walls

Add the following after the paragraph:

Foundation walls in all-weather wood foundation systems shall be restrained at the footing line by the following methods:

1. Basement. A four-inch (102 mm) concrete slab either poured against a minimum one-inch (25.4 mm) x four-inch (102 mm) treated wood screed or a four-inch (102 mm) concrete slab poured against a keyway between the studs.
2. Crawl Space. A minimum four-inch (102 mm) x four-inch (102 mm) nominal size pressure-treated member installed immediately adjacent to the wall and bolted to the footing with 5/8-inch (15.9 mm) diameter anchor bolts maximum two feet 0 inches (610 mm) on center. The maximum soils height against the wall is three feet 0 inches (914 mm).

Exception: The above need not apply if a suitable alternate design is prepared by a civil engineer registered in the State of Alaska and approved by the building official.

23.15.1805.6 Foundation plate or sill bolting

Add the following at the end of the paragraph:

Foundation plates or sills shall be bolted to the foundation or foundation wall with galvanized steel bolts.

23.15.1806 Retaining wall

Add the following sentence:

A factor of safety of 1.10 may be used for load cases with seismic.

23.15.1807.1 Where required

Add the following sentence at the end of the paragraph:

All crawlspace walls below exterior grade shall be damp-proofed.

23.15.1807.1.3 Ground-water control

Add the following at the end of the paragraph:

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

23.15.1807.2.2 Walls

Add a third paragraph to read as follows:

Approved damp-proofing shall be applied over the below-grade portion of exterior crawl space walls prior to backfilling. A treated lumber or plywood strip shall be attached to the wall to cover the top edge of the approved damp-proofing. The wood strip shall extend at least two (2) inches (50.8 mm) above and five (5) inches (127 mm) below finish grade level to protect the approved dampproofing 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 damp-proofing shall extend down to the bottom of the concrete footing.

23.15.1807.3 Waterproofing required

Add the following at the end of the paragraph:

In addition, all exterior below grade walls enclosing habitable spaces shall be waterproofed in accordance with section 1807.3.2.

23.15.1808.2.8.3 Load tests

Delete "registered design professional in the fifth sentence and add "civil engineer registered in the State of Alaska".

23.15.1808.2.23.2.1 Design details for piers, piles and grade beams

Delete the first two sentences.

23.15.1905.12 Cold weather requirements

Amend by adding the following sentence at the end of Item 1.

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

23.15.1907.5.1 Support

Amend by adding a new paragraph to the end of the section to read as follows:

1907.5.1.1 Installation of anchors. Except where approved by the registered design professional, anchors shall be in place prior to placing concrete.

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

23.15.2104.6 Installation of anchors

Add a new section 2104.6 to read as follows:

2104.6 Installation of anchors. Anchors shall be in place prior to grouting.

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

23.15.2208.1 Storage racks

Add the following exception to 2208.1:

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

23.15.2308.9.2.2 Top plates for studs spaced at 24 inches

Delete paragraph in its entirety and substitute the following:

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

23.15.2308.9.8 Pipes in walls

Amend the section by adding a paragraph as follows:

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

23.15.Table 2902.1

Replace the reference to section 410.1 of the International Plumbing Code with the following:

Where water is served in restaurants, drinking fountains shall not be required. In other occupancies where drinking fountains are required, bottle water

dispensers shall be permitted to be substituted for the required drinking fountains. Drinking fountains shall not be required in B and S occupancies containing break rooms with sinks.

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

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

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

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

23.15.3004.3 Area of vents

Revise the Exception to read as follows:

Exception: The total required vent area shall not be required to be permanently open where all the vent openings automatically open upon detection of smoke in the elevator lobbies or hoistway or upon power failure.

23.15.3005.4 Personnel and material hoists

Add new first sentence to read:

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

Add new subsection 3005.4.1 to read:

3005.4.1 Elevators for construction and demolition. All elevators, hoists, and material lifts used for construction to convey personnel and materials for construction and demolition operations shall be required to be certified by either the elevator or lift manufacturer or an independent, NAESA certified elevator inspector at the start of construction, prior to initial use, and each six (6) months thereafter while it remains installed at the project site. Such inspection shall include, but is not be limited to, inspection of the erected frame, the motor, hoist mechanisms, braking mechanism, means of entry and egress, load testing, and governor test. Tests reports and certification letter shall be submitted to the elevator section of the Building Safety Division within 72 hours of completion of the inspection. This requirement shall be retroactive to all permits, started prior to the approval of this code which remain open.

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

23.15.3006.1 Access

Add new paragraph to read:

Access to elevator machine rooms shall be from the inside of the building or shall be by an enclosed, ventilated, and well lighted passageway protected

from the weather. Passageway shall be a minimum of 3'- 6" wide by 6'-8" high, and shall meet the material and construction requirements of this code.

23.15.3006.5 Shunt trip

Delete section 3006.5 "Shunt Trip".

23.15.3007 Elevator sprinkler requirements

Add new section 3007 as follows:

3007 Elevator sprinkler requirements.

3007.1 General requirements. Sprinkler heads and piping shall not be installed in elevator machine rooms.

23.15.CH.34 Existing structures

Delete chapter 34 in its entirety and refer to the International Existing Buildings Code.

23.15 Appendix

Adopt Appendices A, C, G and H.

23.15.H.101.2 Signs exempt from permits

Delete subsection in its entirety and substitute the following:

- A. The following signs shall not require a permit under this chapter. An exemption shall not affect the requirement that a sign be installed and maintained so as to conform with the new requirements of this code and any other applicable law.
1. The changing of the advertising copy or message on a painted or printed sign only. Except for theater marquees or similar signs specifically designed for the use of replaceable copy, electric signs shall not be included in this exemption.
 2. Painting, repainting or cleaning of an advertising structure or the changing of advertising copy or message thereon shall not be considered an erection or alteration requiring a sign permit, unless structural change is made.
 3. Official signs erected by a federal, state or municipal agency.
 4. Signs not exceeding six (6) square feet in area on any one of its faces.
 5. Signs affixed to or painted on a currently operable and licensed vehicle.
 6. Printed messages carried on any surface not attached to or supported from the ground or from a structure. (OA 88-30S).

23.15.H.101.3 Permits required

Add a new section H.101.3 as follows:

A sign permit shall be required before any sign is erected. No permit shall be issued unless the proposed sign fully conforms to all requirements of this chapter and 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 (for B-1 and R-0 zones only), and structures identified by their principal use;
 6. For B-1 and R-0 zones only, a list of all existing signs on the property on which the proposed sign is to be erected and a description of the size and square footage of each such existing display surface area; and
 7. Such other information as the building official determines is reasonably necessary to an evaluation of the proposed sign's compliance with this code.

CHAPTER 23.20 LOCAL AMENDMENTS TO THE INTERNATIONAL MECHANICAL CODE 2006 EDITION**Sections**

23.20.100	Local amendments to the International Mechanical Code, 2006 Edition
23.20.101.2	Scope
23.20.303.4	Protection from damage
23.20.304.3	Elevation of ignition source
23.20.304.12	Aircraft hangars
23.20.306.3	Appliances in attics
23.20.306.4	Appliances under floors
23.20.306.5	Equipment and appliances on roofs or elevated structures
23.20.306.5.2	Electrical requirements
23.20.306.6	Mezzanines and platforms
23.20.401.4.4	Mechanical intake openings serving single-family dwelling units
23.20.TABLE 401.5	Opening sizes in louvers, grilles and screens protecting outdoor exhaust and air intake openings.
23.20.403.3	Ventilation rate

1	23.20.404.1	Enclosed parking garages
2	23.20.404.2	Minimum ventilation
3	23.20.406.1	General
4	23.20.501.2	Exhaust discharge
5	23.20.504.6.1	Maximum length
6	23.20.505.1	Domestic systems
7	23.20.505.2	Domestic Range make-up air
8	23.20.507.2.1.1	Operation
9	23.20.507.9	Clearances for Type I hood
10	23.20.511.1	Dust, stock and refuse conveying systems
11	23.20.515.1	Multi-port exhaust fans
12	23.20.601.4	Contamination prevention
13	23.20.602.1	General
14	23.20.603.9	Joints, seams and connections
15	23.20.701.3	Circulation of air
16	23.20.701.4.2	Attic space
17	23.20.711	Engineered combustion air systems
18	23.20.801.21	Location and support of venting systems other than
19		masonry chimneys
20	23.20.802.9	Vent terminals - ice and snow protection
21	23.20.804.3.4	Horizontal terminations
22	23.20.923.2	Small ceramic kilns – ventilation
23	23.20.1001.1	Scope
24	23.20.1006.7	Boiler safety devices
25	23.20.1006.8	Electrical requirements
26	23.20.1007	Boiler low-water cutoff
27	23.20.1105.3	Refrigerant detector
28	23.20.1105.6.2	Make-up air
29	23.20.1301.1	Scope

23.20.100 Local amendments to the International Mechanical Code, 2006 Edition

The amendments to the International Mechanical Code are listed hereafter by section. The last digits of the section number (after the title and chapter digits) are the section of the International Mechanical Code to which the amendment refers, i.e., 23.20.303 refers to amendments to section 303 of the International Mechanical Code).

Delete entire chapter except for section 101 and 102.

23.20.101.2 Scope.

Delete exception.

23.20.303.4 Protection from 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 1 Install the appliance on a platform a minimum of 24 inches high.
2 The appliance shall not extend beyond the face of the platform.
3 Piping and ductwork shall not be surface mounted to the platform
4 in a location subject to vehicle impact.
- 5 2. Protect the appliance with a barrier. The barrier shall be a minimum
6 of 30" high and be constructed of a minimum 2" diameter schedule
7 40 steel pipe. The barrier must have a minimum 6" setback from
8 the platform or appliance. The maximum unprotected distance shall
9 not exceed five (5) feet. The barrier shall be installed per one of the
10 following methods:
 - 11 a. Buried a minimum of 2'0" deep in compacted soil and
12 imbedded in concrete slab
 - 13 b. Set in a minimum 1'0" x 1'0" square by 1'0" deep block of
14 concrete (slab not included).
 - 15 c. Secured to the wood framed garage floor with flange and
16 stainless steel bolts and imbedded in concrete slab.
 - 17 d. Secured to the concrete slab using a floor flange with a
18 minimum of four $\frac{3}{8}$ " diameter by 3 $\frac{1}{2}$ " long galvanized or
19 stainless anchor bolts.
- 20 3. Mount appliance and associated piping and ductwork to wall and/or
21 suspend from the ceiling in a location clear of any potential vehicle
22 interference.

23
24 In all cases the minimum clear width and depth of the garage shall be
25 maintained in accordance with Title 21.

26 27 **23.20.304.3 Elevation of ignition source.**

28
29 Amend section 304.3 by adding the following to the end of the paragraph:

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

33
34 Group F, M, S-1 and S-2 occupancies with overhead doors providing
35 access to vehicles and equipment containing combustible fuel shall comply
36 with this section.

37
38 Ignition sources shall include any mechanical or electrical device capable
39 of generating a spark, glow or flame.

40 41 **23.20.304.12 Aircraft hangars.**

42
43 Amend by adding a new section as follows:

44 **304.12 Aircraft hangars.** Overhead appliances installed in aircraft storage
45 areas shall be located at least 10' vertically above the upper surface of the
46 wings or engine enclosure of the tallest aircraft which may be housed in the
47 hangar.

48
49 **Exception.** Where a 10' vertical separation cannot be maintained in an
50 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.

23.20.306.3 Appliances in attics.

Add a new Exception #3 as follows:

Exception #3. The passageway and level surface are not required for replacement of horizontal furnaces located above drop ceilings in strip malls. All other code requirements apply.

23.20.306.4 Appliances under floors.

Amend by adding the following as the first sentence:

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

23.20.306.5 Equipment and appliances on roofs or elevated structures

Amend by deleting section 306.5 and replace with the following:

Where new or replaced equipment and appliances requiring access are installed on roofs or elevated structures of new or existing buildings, such access shall be provided by a permanent approved means of access, the extent of which shall be from grade or floor level to the equipment and appliances' level service space. Such access shall be located interior to the building and shall not require climbing over obstructions greater than 30 inches high or walking on roofs having a slope greater than four (4) units vertical in twelve (12) units horizontal (33-percent slope).

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

1. Ladders shall have rung spacing not to exceed fourteen (14) inches on center.
2. Ladders shall have a toe spacing not less than six (6) inches deep.
3. There shall be a minimum of eighteen (18) inches between rails.
4. Rungs shall have a minimum 0.75-inch diameter and be capable of withstanding a 300-pound load.
5. Ladders over thirty (30) feet in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot.
6. Catwalks installed to provide the required access shall be not less than twenty-four (24) inches wide and shall have railings as required for service platforms.

Exceptions:

1. Replaced equipment may be accessed by portable ladder on the single story portion of an existing building not exceeding sixteen (16) feet in height. If the existing building exceeds

sixteen (16) feet in height, an approved interior access shall be provided.

2. This section shall not apply to Group R-3 occupancies.

3. Existing buildings with an existing approved exterior access permanently mounted to the structure.

23.20.306.5.2 Electrical requirements.

Revise the sentence to read as follows:

A receptacle outlet shall be provided as required by the N.E.C.

23.20.306.6 Mezzanines and platforms.

Add a new 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 compliance with the provisions of Local Amendment 23.20.306.5.

23.20.401.4.4 Mechanical intake openings serving single-family dwelling units.

Add a new section as follows:

401.4.4 Mechanical intake openings serving single family dwelling units. Mechanical outdoor air intake openings serving single family dwelling units shall be located a minimum of six (6) feet horizontally from a gas pressure regulator relief vent outlet. Where a vent outlet is located within six (6) feet horizontally of a mechanical outdoor intake opening, such opening shall be located a minimum of two (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 outdoor exhaust and air intake openings.

Revise the minimum and maximum opening sizes as follows:

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

23.20.403.3 Ventilation rate.

Amend by adding to the end of the first sentence the words “or in accordance with the latest version of ASHRAE Standard 62.”

23.20.404.1 Enclosed parking garages.

Revise section to read as follows:

Mechanical ventilation systems for enclosed parking garages are not required to operate continuously where the system is arranged to operate automatically upon detection on a concentration of carbon monoxide of 25 parts per million (ppm) by approved automatic detection devices.

23.20.404.2 Minimum ventilation.

Delete the words “not reduce the ventilation rate below 0.05cfm per square foot of the floor area and the system shall”.

23.20.406.1 General.

Delete section 406.1.

23.20.501.2 Exhaust discharge.

Delete Exception #1 to 501.2.

23.20.504.6.1 Maximum length.

Amend by adding a new paragraph to the beginning of Exception #1:

The maximum length of a clothes dryer exhaust duct may be increased when necessary due to location of the dryer in relationship to an exterior wall or roof; however, the length shall not exceed the dryer manufacturer’s recommendations. When exceeding the code required maximum length, a dryer placard (available at the Building Safety Division handout shelves) stating the length of the run and the amount of ninety (90) degree elbows shall be posted on the wall next to the dryer exhaust connection. The placard shall be laminated or in a moisture resistant sleeve and be secured using screws, staples, or thumbtacks. Push pins are not acceptable. The duct shall be routed using the shortest possible distance and/or the least number of (45) and (90) degree elbows as possible.

Add a new Exception #2:

Exception #2: For distances exceeding the dryer manufacturer’s recommendations, a booster fan, listed for the purpose, shall be used for lengths up to the booster fan manufacturer’s recommendations.

23.20.505.1 Domestic systems.

Delete the first sentence and replace with the following:

Each domestic range, fuel-fired or electric, shall be equipped with either a range hood or an integral downdraft exhaust system discharging to the exterior of the building through a duct constructed of galvanized steel, stainless steel, aluminum, or copper.

Delete Exception No. 1.

23.20.505.2 Domestic Range make-up air.

Add a new section to read as follows:

505.2 Domestic range make-up air. Range hood and downdraft exhaust fans with a capacity exceeding 500 CFM shall have make-up air provided or a backdraft test shall be performed to verify proper operation of all combustion appliances. If backdraft occurs under any operational scenario, make-up shall be required. If make-up air is provided, it shall be interlocked with the exhaust device.

23.20.507.2.1.1 Operation.

Delete section 507.2.1.1 in its entirety.

23.20.507.9 Clearances for Type I hood.

Delete the exception, and replace with the following:

Exception: Clearances shall not be required from gypsum wallboard attached to noncombustible structures provided that a smooth, cleanable, nonabsorbent and noncombustible material is installed between the cooking surface and the hood, extending not less than 18" in all other directions; e.g. stainless steel or ceramic tile with grout sealer.

23.20.511.1 Dust, stock and refuse conveying systems.

Amend by adding the following exception to section **511.1**:

#3: Listed dust collectors and separator designed and installed in accordance with NFPA 664.

23.20.515.1 Multi-port exhaust fans.

Add new section as follows:

515.1 Multi-port exhaust fans. 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 three (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 effected 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 two (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 exceptions:

Exceptions:

1. Environmental air exhaust ducts under positive pressure may extend into or through ducts or plenums if one of the following design approaches is used:
 - a. Route environmental air exhaust ducts inside a shaft when passing through a duct or plenum.
 - b. 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.
 - c. 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.
 - d. Provide flexible duct with no seams in the duct or plenum only to a limit of eight (8) feet. The eight (8) feet limit is due to high static losses. Also, sleeving the metal duct with flexible seamless duct is acceptable.
2. Gas vents installed in accordance with section 503.3.6 in the International Fuel Gas Code.

23.20.602.1 General.

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.

23.20.603.9 Joints, seams and connections.

Add the following exception:

Exception: Continuously welded and locking-type longitudinal joints and seams on ducts operating at static pressures less than 2 inches w.g. pressure classification.

23.20.701.3 Circulation of air.

Amend by adding the following paragraph to section 701.3:

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.

23.20.701.4.2 Attic space.

Delete the wording of this section and replace with the following:

Combustion air shall not be obtained from the attic unless prior written approval is obtained from the authority having jurisdiction.

23.20.711 Engineered combustion air systems.

Amend chapter 7 by adding new section 711:

Section 711 Cold climate alternate requirements for combustion and ventilation air.

711.1 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 shall be permitted to use these alternate design methods.

711.2 Scope. The requirements of this section apply to all fuel gas burning appliances.

Exception: Direct vent appliances, listed cooking appliances, appliances with separated combustion system, enclosed furnaces, refrigerators and domestic clothes dryers.

711.3 Definitions.

Certain words and terms used in this section shall have meanings as listed. The definitions listed below shall apply to this section only, even though they may differ with broader definitions found elsewhere in the code.

Combustion air is air required for stoichiometric combustion, plus excess air, plus flue dilution air.

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.

711.4 General.

711.4.1 Air supply. Fuel-burning equipment shall be provided with a sufficient supply of combustion and ventilation air.

711.4.1.1 Enclosures containing fuel burning appliances. Enclosures shall be provided with minimum unobstructed combustion air openings as specified in section 711.9, and arranged as specified

in sections 711.5 and 711.6, and ventilation air systems as specified in section 711.10.

711.4.1.2 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 711.9 and 711.10.

711.5 Combustion air openings

711.5.1 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.

711.5.2 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: 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.

711.5.3 Screening. Combustion air openings shall be covered with corrosion-resistant screen of 1/2 inch mesh, except as provided in section 711.7.3.

Exception: Combustion air openings serving a nonresidential portion of a building may be covered with a screen having openings larger than 1/2 inch but in no case larger than 1 inch.

711.6 Sources of combustion and ventilation air.

711.6.1 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.

711.6.2 Under-floor supply. Combustion and ventilation air openings may connect with under-floor areas conforming to the following requirements:

1. Under-floor spaces having unobstructed openings to the exterior which are sized to not exceed the maximum system static pressure requirements specified in sections 711.9 and 711.10.
2. The height of the under-floor space shall comply with the requirements of the Building Code and shall be without obstruction to the free flow of air.

711.6.3 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.

711.6.4 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 where objectionable quantities of flammable vapor, lint or dust are given off. Combustion and ventilation air shall not be taken from a machinery room.

711.7 Combustion and ventilation air ducts.

711.7.1 General. Combustion and ventilation air ducts shall:

1. Be of galvanized steel complying with chapter 6 or equivalent corrosion-resistant material approved for this use;
2. Have a minimum cross-sectional dimension of three (3) inches; and
3. Serve a single appliance enclosure.

711.7.2 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.

711.7.3 Screen. Neither end of ducts terminating in an attic shall be screened.

711.8 Special conditions created by mechanical exhausting or fireplaces.

1 Operation of exhaust fans, kitchen ventilation systems, clothes dryers or
2 fireplaces shall be considered in determining combustion and ventilation air
3 requirements to avoid unsatisfactory operation of installed fuel burning
4 appliances.
5

6 **711.9 Area of combustion air openings.**
7

8 **711.9.1 General.** The free area of openings, ducts or plenums,
9 screens and louvers supplying combustion air to enclosures
10 containing fuel-burning appliances shall be as required: The
11 opening(s) shall communicate directly or by means of ducts with
12 outdoors or to such spaces (crawl space) that freely communicate
13 with outdoors and shall be sized in accordance with Table No. 7-1.
14

15 **711.10 Ventilation air.**
16

17 **711.10.1 General.** In addition to the combustion air required,
18 sufficient ventilation shall be supplied for proper operation of
19 equipment. Ventilation system shall be designed to maintain
20 positive or atmospheric pressures within the enclosure. If exhaust
21 fans are provided, mechanical make-up air fan shall be installed to
22 make-up exhausted air. Natural or gravity make-up air is not
23 allowed.

TABLE NO. 7-1 COMBUSTION AIR SYSTEM DESIGN CRITERIA

Fuels	System Static Pressure Limits ¹			Combustion Air Requirements
	Atmospheric		Forced Draft	
	Draft Hoods	Barometric Dampers		All Types
GAS (Natural, Propane, Butane)	0.02" WG	0.02" WG	0.05" WG	24 CFM 100,000 BTUH
LIQUID (Light Oil, Heavy Oil)	0.02" WG	0.02" WG	0.05" WG	27.1 CFM 100,000 BTUH
SOLID (Coal, Coke)	0.02" WG	0.02" WG	0.05" WG	30.8 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
1 gallon No. 2 fuel oil requires 106 lbs. air
1 lb. semi bituminous coal requires 11.2 lbs. air
Convert to CF/1000 Btu

GAS: 9.6 cu. ft. air X 1 cu. ft. gas = 9.6 cu. ft. air/1000 btu
1 cu. ft. gas 1000 Btuh (14.4 @ 50% excess)

OIL: 106 lbs. air X 1 cu. ft. air X 1 gallon oil X 1000=10.85 cu. ft. air/1000 Btu
1 gallon oil 0.0698 lbs.* 140,000 Btu (16.3 @ 50% excess)

COAL**: 11.2 lbs. air X 1 cu. ft. air X 1 lb. coal X 1000= 2.3 cu. ft. air/1000 Btu
1 lb. coal 0.0698 lbs.* 13,000 Btu (18.5 @ 50% excess)

* Air at 2000 feet above sea level. Installations above this shall derate appliance output 4%/1000 feet.

** Confirm heat capacity of coal, since it varies with type of coal.

EXAMPLE: Combustion Air Flow Rates (CFM) per 100,000 Btuh input. Verify heating values and adjust CFM as required.

STOICHIOMETRIC COMBUSTION

0% Excess air

@ 50% Excess air

Natural Gas	16.0 CFM	24 CFM
1000 Btu/cu. ft.	100,000 Btuh	100,000 Btuh
No. 2 Fuel Oil	18.1 CFM	27.1CFM
140,000 Btu/gal.	100,000 Btuh	100,000 Btuh
Coal - Semi Bituminous	20.5 CFM	30.8 CFM
13,000 Btu/lb	100,000 Btuh	100,000 Btuh

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

Add a new section as follows:

801.21 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 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.

23.20.802.9 Vent terminals - ice and snow protection.

Amend by adding the following section:

802.9 Vent terminals – ice and snow protection. Vent terminations penetrating a metal roof with a pitch shall be protected by an ice or snow deflector of an approved type acceptable to the Administrative Authority.

23.20.804.3.4 Horizontal terminations.

Add the following two sentences to Item 6:

An anticipated snow depth of twelve (12) inches shall be used when determining the manufacturer's minimum vent termination height. Measurements shall be made to the bottom of the vent outlet.

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 twelve (12) inches and thirty (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 twelve (12) inches above any portion of a building within four (4) feet and terminate no less than four (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".

23.20.1006.7 Boiler safety devices.

Amend by replacing section 1006.7 with the following:

1006.7 Boiler safety devices. Boilers shall be equipped with controls and limit devices as required by the manufacturer's installation instructions, Table 1006.7 and the conditions of the listing.

23.20. Table 1006.7 – CONTROLS AND LIMIT DEVICES FOR AUTOMATIC BOILERS

Trial for Main Burner Flame			Safety Control Timing (Nominal Maximum Time in Seconds)													
Boiler Group	Fuel	Fuel Range ¹ (Inclusive) (x0.293071 for W)	Type Pilot ²	OF	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	400,001-2,500,000Btu/h	Interrupted or intermittent		15	15	15	2-4	Not required	Required	Not required	Not required	Required	Required	Not required	Required
C	Gas	2,500,001-5,000,000Btu/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:
 - 2 1.1 The maximum burner input as shown on the burner nameplate or as
 - 3 otherwise identified by the manufacturer.
 - 4 1.2 The nominal boiler rating, as determined by the building official, plus 25
 - 5 percent.
- 6 2 Automatic boilers shall have one flame failure device on each burner which shall
- 7 prove the presence of a suitable ignition source at the point where it will reliably
- 8 ignite the main burner, except that boiler Groups A, B, E, F and G which are
- 9 equipped with direct electric ignition shall monitor the main burner, and all boiler
- 10 groups using interrupted pilots shall monitor only the main burner after the
- 11 prescribed limited trial and ignition periods. Boiler Group A equipped with
- 12 continuous pilot shall accomplish 100 percent shutoff within 90 seconds upon
- 13 pilot flame failure. The use of intermittent pilots in boiler Group C is limited to
- 14 approved burner units.
- 15 3 In boiler Groups B, C and D, a 90-second main burner flame failure limit may
- 16 apply if continuous pilots are provided on manufacturer-assembled boiler-burner
- 17 units approved by an approved testing agency as complying with nationally
- 18 recognized standards approved by the building official. Boiler Groups F and G
- 19 equipped to reenergize their ignition system within 0.8 second after main burner
- 20 flame failure shall be permitted 30 seconds for Group F or 15 seconds for
- 21 Group G to reestablish its main burner flame.
- 22 4 Boiler Groups C and D shall have controls interlocked to accomplish a
- 23 nonrecycling fuel shutoff upon high or low gas pressure, and boiler Groups F, G
- 24 and H using steam or air for fuel atomization shall have controls interlocked to
- 25 accomplish a nonrecycling fuel shutoff upon low atomizing steam or air pressure.
- 26 Boiler Groups F, G and H equipped with a preheated oil system shall have
- 27 controls interlocked to provide fuel shutoff upon low oil temperature.
- 28 5 Automatic boilers shall have controls interlocked to shut off the fuel supply in the
- 29 event of draft failure if forced or induced draft fans are used or, in the event of
- 30 low combustion airflow, if a gas power burner is used. Where a single motor
- 31 directly driving both the fan and the oil pump is used, a separate control is not
- 32 required.
- 33 6 Boiler Groups C, D and H, when firing in excess of 400,000 Btu per combustion
- 34 chamber, shall be provided with low fire start of its main burner system to permit
- 35 smooth light off. This shall normally be a rate of approximately one-third of its
- 36 maximum firing rate.
- 37 7 Boiler Groups C, D and H shall not permit pilot or main burner trial for ignition
- 38 operation before a purging operation of sufficient duration to permit a minimum
- 39 of four complete air changes through the furnace, including combustion chamber
- 40 and the boiler passes. Where this is not readily determinable, five (5) complete
- 41 air changes of the furnace, including combustion chamber up to the first pass,
- 42 shall be considered equivalent. An atmospheric gas burner with no mechanical
- 43 means of creating air movement or an oil burner which obtains two-thirds or more
- 44 of the air required for combustion without mechanical means of creating air
- 45 movement shall not require purge by means of four (4) air changes so long as its
- 46 secondary air openings are not provided with means of closing. If such burners

1 have means of closing secondary air openings, a time delay shall be provided
2 which puts these closures in a normally open position for four (4) minutes before
3 an attempt for ignition. An installation with a trapped combustion chamber shall
4 in every case be provided with a mechanical means of creating air movement for
5 purging.

- 6 8 Every automatic hot-water-heating boiler, low-pressure hot-water-heating boiler,
7 and power hot-water boiler shall be equipped with two (2) high-temperature limit
8 controls with a manual reset on the control with the higher setting interlocked to
9 shut off the main fuel supply, except the manual reset on the high-temperature
10 limit control shall not be required on any automatic package boiler not exceeding
11 400,000 Btu/h input and approved by an approved testing agency. Every
12 automatic hot-water heating, power boiler and package hot-water supply boiler
13 shall be equipped with one low-water-level limit control with a manual reset
14 interlocked to shut off the fuel supply, installed to prevent damage to the boiler
15 and to permit testing of the control without draining the heating system except on
16 boilers used in Group R Occupancies of less than six (6) units and in Group M
17 Occupancies and further, except the low-water-level limit control is not required
18 on package hot-water-supply boilers approved by a nationally recognized testing
19 agency. However, a low-water-flow limit control installed in the circulating
20 water line may be used instead of the low-water-level limit control for the same
21 purpose on coil-type boilers.

- 22 9 Every automatic low-pressure steam-heating boiler, small power boiler and power
23 steam boiler shall be equipped with two high-steam pressure limit controls inter-
24 locked to shut off the fuel supply to the main burner with manual reset on the
25 control with the higher setting, and two (2) low-water-level limit controls, one of
26 which shall be provided with a manual reset device and independent of the feed
27 water controller. Coil-type flash steam boilers may use two (2) high-temperature
28 limit controls, one of which shall be manually reset in the hot-water coil section
29 of the boiler instead of the low-water-level limit control.

- 30 10 Boiler Groups C, D and H shall use an approved automatic reset safety shutoff
31 valve for the main burner fuel shutoff, which shall be interlocked to the
32 programming control devices required. On oil burners where the safety shutoff
33 valve shall be subjected to pressures in excess of ten (10) psi when the burner is
34 not firing, a second safety shutoff valve shall be provided in series with the first.
35 Boiler Groups C and D, using gas in excess of 1-pound-per-square-inch pressure
36 or having a trapped combustion chamber or employing horizontal fire tubes, shall
37 be equipped with two (2) approved safety shutoff valves, one of which shall be an
38 automatic-reset type, one of which may be used as an operating control, and both
39 of which shall be interlocked to the limit-control devices required. Boiler Groups
40 C and D using gas in excess of 1-pound-per-square-inch pressure shall be
41 provided with a permanent and ready means for making periodic tightness checks
42 of the main fuel safety shutoff valves.

- 43 11 Control and limit device systems shall be grounded with operating voltage not to
44 exceed 150 volts except, on approval by the building official, existing control
45 equipment to be reused in an altered boiler control system may use 220-volt
46 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 section in its entirety.

23.20.1007 Boiler low-water cutoff.

Delete section in its entirety.

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 Make-up air.

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

23.20.1301.1 Scope.

Revise the first sentence of the section to read as follows:

The design, installation, construction, and repair of fuel oil storage and piping systems shall be in accordance with this chapter and NFPA 31.

CHAPTER 23.25 LOCAL AMENDMENTS TO THE UNIFORM PLUMBING CODE 2006 EDITION

Sections

23.25.100	Local amendments to the Uniform Plumbing Code, 2006 Edition
23.25.102-103	Delete
23.25.204.0	"B" definitions
23.25.313.12.4	Ratproofing
23.25.315.0	Trenching, excavation, and backfill
23.25.321.0	Mezzanines and platforms
23.25.402.4	Metered faucets
23.25.408.2.2	Water closet seats
23.25.411.1.1	Unvented garage floor drains
23.25.412.	Minimum number of required fixtures
23.25.414.1	Access to whirlpool bathtub pump
23.25.419.0	Minimum hot water supply temperature
23.25.508.0	Other water heater installation requirements
23.25.508.4.1	Water heaters located in mobile homes

1	23.25.508.5	Relief valve discharge
2	23.25.508.14	Installation in residential garages
3	23.25.603.0	Cross-connection control
4	23.25.603.3	General requirements
5	23.25.603.3.9	Area drain sizing for backflow assemblies
6	23.25.603.4.6.5	Lawn irrigation
7	23.25.603.4.8	Water cooled compressors, degreasers
8	23.25.603.4.23	Potable water supply to dental chairs
9	23.25.603.4.24	Hydronic heating/cooling
10	23.25.603.4.25	Steam systems
11	23.25.603.4.26	Cooling towers
12	23.25.604.1	Materials - water pipe and fittings
13	23.25.604.2	Materials - copper tube
14	23.25.604.8	Materials - plastic pipe materials
15	23.25.605.3	Shut off valves in multi-family dwelling units
16	23.25.608.0	Water pressure, pressure regulators and pressure relief valves
17	23.25.609.3.2	Installation
18	23.25.609.3.3	Water supply accessibility
19	23.25.609.4	Testing
20	23.25.609.10.1	Water hammer
21	23.25.610.8	Size of meter and building supply pipe using Table 6-6
22	23.25.612.0	Indoor water meter setter
23	23.25.704.0	Fixture connections (drainage)
24	23.25.719.0	Cleanouts
25	23.25.801.3	Bar and fountain sink traps
26	23.25.815.0	Soda fountains, condensates, drip pans, ice machines, and
27		other similar equipment
28	23.25.908.4	Bathroom wet venting
29	23.25.Table 10-1	Horizontal distance of trap arms
30	23.25.1014.1	Grease interceptors
31	23.25.1017.1	Interceptors required
32	23.25.1101.1	Where required
33	23.25.1101.3	Material uses
34	23.25.1101.5	Subsoil drains
35	23.25.1101.6	Building subdrains
36	23.25.1101.9	Filling stations and motor vehicle washing establishments
37	23.25.1101.11.1	Primary roof drainage
38	23.25.1101.11.2.2.2	Combined system
39	23.25.1108.0	Controlled-flow roof drainage
40	23.25.1301.1	Application
41	23.25.1309.0	Veterinary clinics
42	23.25.1309.8	Vacuum systems for dental offices
43	23.25.1310.3.1	Definitions – health care facilities
44		
45	23.25.100	Local amendments to the Uniform Plumbing Code, 2006 Edition.

Amendments to the 2006 Uniform Plumbing Code and appendices A, B, D, parts E-M of Appendix E, I, and L, (excluding L 7.0 and L 8.0), are adopted and listed hereafter by section. The digits after the title and chapter digits are the section number of the Uniform Plumbing Code to which the amendment refers, e.g., 23.25.510.8 refers to section 510.8 of the Uniform Plumbing Code.

23.25.102-103 Delete.

Delete sections 102 and 103; refer to the Anchorage Administrative Code.

23.25.204.0 "B" definitions.

Amend by deleting the definition of bathroom and substitute the following:

Bathroom: Any room or space containing a bathtub, shower, hot tub, Jacuzzi or swimming pool.

23.25.313.12.4 Ratproofing.

Delete Section 313.12.4 in its entirety.

23.25.315.0 Trenching, excavation, and backfill.

Amend section 315.4 by adding, after the third sentence, the following:

Backfill material shall be 3/8" pea gravel or smaller. In the case of cast iron drain, waste and vent piping, the backfill material shall be 3/4" gravel and earth or smaller.

23.25.321.0 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 with:

1. Run spacing not to exceed fourteen (14) inches on center.
2. Toe spacing not less than six (6) inches deep.
3. At least 18" spacing between rails.
4. Rungs at least 0.75 inches in diameter capable of withstanding a 300 lb. load.
5. Offset sections and landings capable of withstanding 100 pounds per square foot when heights exceed 30 feet.

23.25.402.4 Metered faucets.

Add to the end of the first sentence of section 402.4:

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

23.25.408.2.2 Water closet seats.

Amend by adding the words, or for private use, after "dwelling units" to read as follows:

408.2.2 All water closet seats, except those within dwelling units or for private use, shall be of the open front type.

23.25.411.1.1 Unvented garage floor drains.

- A. A maximum of three (3) unvented floor drains may be installed in one- and two-family residential garages. Each shall have a three-inch (3") (76mm) minimum trap and trap arm, and two-inch (2") (50.8mm) floor drain. No other plumbing fixtures may be connected to the garage drain piping. When a contractor or homeowner installs this type of system, they shall install the waste lines as per the Uniform Plumbing Code regarding slopes and backfill material.
- B. 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.

23.25.412. Minimum number of required fixtures.

Delete section 412.0 and refer to the Building Code.

23.25.414.1 Access to whirlpool bathtub pump.

Add to section 414.1:

The access shall be required to be a minimum of 16"x16", although alternate access arrangements may be considered. The intent is the pump may be removed easily and safely. All pumps shall be located so the supporting or securing bolts are no more than two (2) feet from the access opening. The access panel may be siliconed in place and shall remain easily removable. If removal of a pump motor is in question, the contractor shall be required to remove the pump motor to demonstrate proper access.

23.25.419.0 Minimum hot water supply temperature.

The minimum hot water temperature to showers, tub and shower combinations, and tub fillers shall be 110°.

23.25.508.0 Other water heater installation requirements.

Replace Section 508.4 with the following:

508.4 Water heaters shall be installed in a watertight pan of corrosion-resistant material. The pan shall be equipped with a minimum three quarter (3/4) inch (20mm) 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.

23.25.508.4.1 Water heaters located in mobile homes.

Add new section as follows:

508.4.1 Water heaters located in mobile homes.

- A. Installation of a water heater located in a compartment off the bedroom shall be acceptable if the water heater was factory installed, if the compartment is sealed from the bedroom by a panel screwed to the wall, and if the combustion air is taken from a source outside of the bedroom and complies with Uniform Plumbing Code.
- B. A water heater replaced in an existing mobile home shall be replaced with a water heater tested, approved, and listed for use in mobile homes. The proper combustion air shall be installed to supply the new water heater per Uniform Plumbing Code.

23.25.508.5 Relief valve discharge.

Replace Section 508.5 with the following:

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.

23.25.508.14 Installation in residential garages.

Delete the words "unless listed as flammable vapor ignition resistant" from paragraph (1).

23.25.603.0 Cross-connection control.

Amend 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 installation of cross-connections. The control or elimination of cross-connections shall be in accordance with this code, the current edition of the cross-connection control manual published by the Pacific Northwest section of The American Water Works Association and the manual of Cross-Connection Control published by the University of Southern California Foundation for Cross-Connection Control. In the event a conflict exists between the technical publications adopted herein and the Uniform Plumbing Code, the most stringent provision shall apply.

1
2 UNSAFE FACILITIES: The Municipality of Anchorage may refuse to furnish
3 water and may discontinue services to any premises where plumbing facilities,
4 appliances, or equipment using water are dangerous, unsafe, or not in conformity
5 with the water utility tariff or other related municipal ordinances. No potable water
6 service connection to any premises shall be installed or continued in use by a
7 purveyor unless the potable water supply is protected by all necessary backflow
8 prevention devices and assemblies. The installation or maintenance of a cross-
9 connection, endangering the quality of the purveyor's water supply, shall be
10 unlawful and is prohibited.

11
12 ADMINISTRATIVE AUTHORITY: The Building Official or authorized
13 representative.

14
15 PURVEYOR: The operator or owner of a water supply.

16
17 PREMISES: Real property, including any house or building thereon, located
18 within the Municipality of Anchorage.

19
20 CROSS-CONNECTION INSPECTIONS: No water shall be delivered to any
21 structure hereafter built within the Municipality of Anchorage until it is inspected
22 by the Administrative Authority for possible cross-connections and approved as
23 being protected from such cross-connections.

24
25 Inspections shall be made periodically of all potentially hazardous buildings,
26 structures, or improvements of any nature now receiving water through the
27 municipal water system, for the purpose of ascertaining whether cross-
28 connections exist. Such inspections shall be made by the Administrative
29 Authority.

30
31 Any building modification requiring a plumbing or mechanical permit may
32 require a cross-connection inspection and compliance.

33
34 POSSIBLE CROSS-CONNECTIONS: Backflow prevention assemblies or devices
35 shall be installed in any premises where, in the judgment of the Administrative
36 Authority, the nature and extent of activities, or the materials used or stored on the
37 premises, may present a hazard to the potable water supply in the event a cross-
38 connection were to be made; even though such cross-connection has not been
39 made. Such circumstances include, but are not limited to:

- 40
41
- Premises having an auxiliary water supply.
 - Premises having intricate plumbing arrangements making it impractical to ascertain whether or not cross-connections in fact exist.
 - 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.
- 44
45
46

- Premises having a repeated history of cross-connections being established or re-established.
- 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.
- 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 with 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.

23.25.603.3 General requirements.

Amend by adding a second paragraph to section **603.3.1** as follows:

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

23.25.603.3.9 Area drain sizing for backflow assemblies.

Delete Section 603.3.9 and replace with the following:

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"
1 ¼" – 2"	3"
2 ½" – 3"	4"
4" and greater	6"

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

23.25.603.4.6.5 Lawn irrigation.

Add new paragraphs as follows:

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 is 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 complying with all the requirements in the Anchorage Administrative Code.

23.25.603.4.8 Water cooled compressors, degreasers.

Amend section by adding 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.

23.25.603.4.23 Potable water supply to dental chairs.

Add new section as follows:

603.4.23 Potable water supply to each individual dental chair shall be protected by a backflow preventer as approved by the administrative authority.

23.25.603.4.24 Hydronic heating/cooling.

Add a new section as follows:

603.4.24 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 to be installed on any directly connected potable water makeup piping to the system. (A suitable example of this backflow preventer is a Watts 9D or a Hersey BCP valve.) In addition, the below listed requirements shall be complied with 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 with 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.

23.25.603.4.25 Steam systems.

Add new section 603.4.25 as follows:

Due to 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.

23.25.603.4.26 Cooling towers.

Add new section as follows:

603.4.26 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.

23.25.604.1 Materials - water pipe and fittings.

Add a sentence to the end of 604.1 to read as follows:

Asbestos-Cement, PE, PVC, PEX-AL-PEX, PE-AL-PE and HDPE shall not be used for cold water building supply distribution systems outside a building.

23.25.604.2 Materials - copper tube.

Amend to delete the words "or underground outside of structures" in the Exception.

23.25.604.8 Materials - plastic pipe materials.

Amend by deleting paragraph 604.8 and the exception and substitute the following:

604.8 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.

23.25.605.3 Shut off valves in multi-family dwelling units.

Add a sentence to the end of section 605.3 to read as follows:

Shutoff valves shall be visible and shall not exceed ten (10) feet from a crawl space access when shutoff valves are located in a crawl space.

23.25.608.0 Water pressure, pressure regulators and pressure relief valves.

Amend by deleting paragraph 608.5 and substitute the following:

608.5 Relief valves shall be provided with a drain, not smaller than the relief valve outlet of galvanized steel or hard drawn copper pipe and fittings, CPVC or listed relief valve drain tube with fittings which shall not reduce the internal bore of the pipe tubing (straight lengths as opposed to coils), and shall extend from the valve to a floor drain or other approved location inside the building. The drain pipe shall terminate not more than two (2) feet (610 MM) nor less than six (6) inches (152 MM) above the floor drain or other approved location and point downward. No part of such drain pipe shall be trapped, and the terminal end shall not be threaded. Each relief valve drain shall be piped independently of other relief valve drains.

23.25.609.3.2 Installation.

Add 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.

23.25.609.3.3 Water supply accessibility.

Where the building water supply pipe enters the building, it shall exit the ground or slab in an area with a minimum of forty inches (40") clear space between ground or slab and bottom of structure, and provide an unobstructed passageway no less than forty (40) inches high and twenty-two (22) inches wide from the water supply entrance to the crawlspace access.

23.25.609.4 Testing.

Amend by deleting the words "Except for plastic piping" before "a fifty (50) pound test, to read as follows:

Upon completion of a section or of the entire hot and cold water supply system, it shall be tested and proved tight under a water pressure not less than the working pressure under which it is to be used. The water used for tests shall be obtained from a potable source of supply. A fifty (50) pound per square inch (344.5 k Pa) air pressure may be substituted for the water test. In either method of test, the piping shall withstand the test without leaking for a period of not less than fifteen (15) minutes.

23.25.609.10.1 Water hammer.

Add sentences to the end of Section 609.10 to read as follows:
Properly sized expansion tanks approved for potable water may be used in a single-family and duplex residence in lieu of water hammer arresters. Such expansion tanks must be installed on the cold water piping between the shutoff valve and each water heater maker location. In the event the expansion tanks do not eliminate the water hammer, mechanical water hammer devices will be required. Examples of quick-acting valve locations include, but are not limited to, a dishwasher, clothes washer, toilet ballcock, icemaker, and any single handle faucet.

23.25.610.8 Size of meter and building supply pipe using Table 6-6.

Amend by deleting the last sentence of section 610.8 and substitute the following:
No new street service or building supply pipe shall be less than one (1) inch (25.4 mm) in diameter.

23.25.612.0 Indoor water meter setter.

Add new sections as follows:

612.0 Indoor water meter setter.

612.1 All newly constructed single family, duplex and triplex residences shall install 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 be valved 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 under floor or crawl spaces, the maximum distance from the access opening to the meter shall not exceed ten (10) feet (3048 mm).

612.2 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 twenty inches (20") in (508 mm) length. The piping shall be

supported to provide a permanent support for the water meter when installed.

612.3 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.

23.25.704.0 Fixture connections (drainage).

Change 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 the fixture...”

23.25.719.0 Cleanouts.

Delete first paragraph of 719.1 and substitute the following:

719.1 Cleanouts shall be placed at the end of building drains, two (2) feet (610 mm) outside building and shall be of same material as building drain.

23.25.801.3 Bar and fountain sink traps.

Amend paragraph 801.3 by deleting the words “5 feet” from the last sentence and substituting the words “fifteen (15) feet.”

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

Add new 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" I.D.
3. The equipment drain pipe from the outlet or tailpiece to the lift station receiver shall not exceed five (5) feet measured along the centerline of the pipe and shall be piped per UPC section 803.0.
4. 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 Uniform Plumbing Code section 701.

- B. Vending company employees may install the drainage piping from the equipment they install to the approved point of disposal, provided such piping is in accordance with the Uniform Plumbing Code requirements.
- C. If the equipment installed requires a water supply, it shall be provided by a properly licensed plumber to within ten (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.

23.25.908.4 Bathroom wet venting.

Delete in its entirety.

23.25.Table 10-1 Horizontal distance of trap arms.

Add ** after Horizontal Distance of Trap Arms and add below Table 10-1 the following:

- ** Trap arms for residential floor drains may be extended beyond the limits of Table 10-1 to where they pass under the nearest wall before installing the required vent.

23.25.1014.1 Grease interceptors.

Amend by adding the following words to the first sentence after the words "leading from sinks":

- 1014.1** "such as pot sinks (two- and three-compartment), scullery sinks, dishwashing sinks, silverware sinks".

23.25.1017.1 Interceptors required.

Amend by deleting reference to "550 gallons" and replacing with "100 gallons".

23.25.1101.1 Where required.

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

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

23.25.1101.3 Material uses.

Amend by deleting reference to "Chapter 15 Firestop Protection" and replacing with "the Building Code".

23.25.1101.5 Subsoil drains.

Amend section 1101.5.1 by adding the following to the beginning of the section:

When required by the authority having jurisdiction...

23.25.1101.6 Building subdrains.

Amend section 1101.6 by deleting the word “public” and inserting the word “storm”.

23.25.1101.9 Filling stations and motor vehicle washing establishments.

Amend section 1101.9 by adding to the beginning of the paragraph:

When required by the authority having jurisdiction...

23.25.1101.11.1 Primary roof drainage.

Delete the first sentence and replace 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.

23.25.1101.11.2.2.2 Combined system.

Delete 1101.11.2.2.2 and replace with the following:

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 must 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 case of below grade freeze-up of 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.

23.25.1108.0 Controlled-flow roof drainage.

Delete sections 1108.1 and 1108.2 in their entirety.

23.25.1301.1 Application.

Amend by adding to the end of the first sentence the words “or in accordance with the latest version of AIA Guidelines for Design and Construction of Hospital and Health Care Facilities.”

23.25.1309.0 Veterinary clinics.

Amend by adding new section:

23.25.1309.1.1 Veterinary clinics.

The material requirements, installation, and testing practices of NFPA 99 for Level 3 gas and vacuum systems shall apply to veterinary clinics except third party verification is not required.

23.25.1309.8 Vacuum systems for dental offices.

Amend by adding new section:

23.25.1309.8 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 99C (most current edition) (NFPA 99 5.3.10) for full text of these requirements.

- A. Level 3 wet vacuum systems (in dental offices) may be installed using schedule 40 PVC with pressure fittings (NFPA 99 5.3.10.2 and 5.3.10.3). 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 Level 3 system if:
 - 1. The system is entirely separate from other Level 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 (NFPA 99 Chapter 18).
- C. The wet vacuum system (in dental offices) shall be verified by a third party technically competent and experienced in the field of Level 3 vacuum systems and testing, and meeting the requirements of ANSI/ASSE Standard 6030 (NFPA 5.3.12.3).

23.25.1310.3.1 Definitions – health care facilities.

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

CHAPTER 23.30 LOCAL AMENDMENTS TO THE NATIONAL ELECTRICAL CODE 2005 EDITION.

Sections:

23.30.010	Local amendments to the National Electrical Code 2005 Edition
23.30.020	Certificate of fitness - right to inspection
23.30.210.8(a)	Dwelling units
23.30.210.8(b)	Other Than Dwelling Units
23.30.210.23(e)	Outlets per circuit
23.30.210.52(I)	Parking spaces
23.30.210.52(J)	Underfloor (crawl) spaces

1	23.30.230.1	Scope
2	23.30.230.32	Protection against damage
3	23.30.230.70(A)(1)	Disconnect at readily accessible location
4	23.30.230.70(A)(3)	Remote control
5	23.30.230.70(B)	Marking
6	23.30.240.24	Location in or on premises
7	23.30.250.52(A)(1)	Metal underground water pipes
8	23.30.250.53(D)(2)	Metal underground water pipes
9	23.30.250.118	Types of equipment grounding conductors
10	23.30.300.4	Protection against physical damage
11	23.30.300.5(d)	Protection from damage - buried cable or conductors
12	23.30.310.13	Conductor construction and applications
13	23.30. 330.40	Insulating bushing
14	23.30. 334.10	Uses permitted
15	23.30.334.12	Uses not permitted
16	23.30.334.104	Conductors
17	23.30.362.12	Uses not permitted
18	23.30.410.8	Fixtures in clothes closets
19	23.30.445.18	Disconnecting means required for generators
20	23.30.511.3	Classifications of locations

21

22 **23.30.010 Local amendments to the National Electrical Code 2005**

23 **Edition.**

24 The amendments to the 2005 edition of the National Electrical Code are listed here by

25 section. The last digits of the number after the title and chapter digits are the article and

26 section of the National Electrical Code to which the amendment refers, i.e., 23.30.210-

27 8(a) refers to section 210-8(a) of the National Electrical Code, 2005 Edition.

28

29 **23.30.020 Certificate of fitness - right to inspection.**

30 Municipal electrical inspectors may contact any electrical worker performing work for

31 which a certificate of fitness is required by Alaska Statue 18.62.070 and request the

32 person to exhibit their certificate of fitness or trainee certificate of fitness. The inspector

33 may immediately serve upon that person a notice to cease any further work in that

34 occupation until the person has demonstrated possession of the required certificate.

35

36 **23.30.210.8(a) Dwelling units.**

37

38 Replace 210.8(a)(7) as follows:

39 **Sinks.** Where receptacles are installed within six (6) feet of the outside edge of a

40 sink.

41

42 **23.30.210.8(b) Other Than Dwelling Units.**

43

44 Add sections 210-8(b)(4) and 210-8(b)(5) as follows:

- 45 (4) Outdoors where accessible from ground level.
- 46 (5) Within six (6) feet of the outside edge of a sink.

23.30.210.23(e) Outlets per circuit.

Add a subsection (e) to section 210.23 to read as follows:

Outlets per circuit. In dwelling units, no more than thirteen (13) 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(I) Parking spaces.

Add a new subsection (I) as follows:

(I) **Parking spaces.** For each dwelling unit and mobile home, there shall be at least one (1) exterior G.F.C.I protected duplex outlet on a separate 20-ampere circuit adjacent to on-site parking locations.

Add exception to new subsection (I) as follows:

Exception: For multi-family dwellings, eight-plex and larger where indoor parking is provided, the required number of exterior duplex receptacles may be reduced by the number of indoor heated parking locations.

23.30.210.52(J) Underfloor (crawl) spaces.

Add a new subsection (J) as follows:

A receptacle shall be provided in each unconnected space; the receptacle shall be located adjacent to a sump when one is provided.

23.30.230.1 Scope.

Add the following:

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

23.30.230.32 Protection against damage.

Add a second paragraph as follows:

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) Disconnect at readily accessible location.

Revise the section to read:

The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors.

The service disconnecting means shall be 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.

Revise the section to read:

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 and the Anchorage Fire Department Electrical Disconnects Bulletin #05-003.

(FPN: See electrical utility standards for their requirements; AFD Electrical Disconnects Bulletin #05-003 is available at Building Safety.)

23.30.230.70(B) Marking.

Add a sentence to end of the section as follows:

Identification signage shall meet the requirements of Anchorage Fire Department Electrical Disconnects Bulletin #05-003.

23.30.240.24 Location in or on premises.

Add a subsection (f) as follows:

Overcurrent devices shall not be installed over stairs.

23.30.250.52(A)(1) Metal underground water pipes.

Delete the following:

Exception: In industrial and commercial buildings where conditions of maintenance and supervision ensure that only qualified persons service the installation, interior metal water piping located more than 1.52 meters (5ft) from the point of entrance to the building shall be permitted as part of the grounding electrode system or as a conductor to interconnect electrodes that are part of the grounding electrode system, provided that the entire length, other than short sections passing perpendicular through walls, floors or ceilings, of the interior metal water pipe that is being used for the conductor is exposed.

23.30.250.53(D)(2) Metal underground water pipes.

Delete the following:

Exception: The supplemental electrode shall be permitted to be bonded to the interior metal water piping at any convenient point as covered in 250.52(A)(1), Exception.

23.30.250.118 Types of equipment grounding conductors.

Delete subsections (2) thru (14) and replace with:

- (2) The copper sheath of mineral insulated, metal-sheathed cable.
- (3) Metal enclosures of busways listed for grounding.

23.30.300.4 Protection against physical damage.

Amend by adding new subsection (g):

- (g) 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.

23.30.300.5(d) Protection from damage - buried cable or conductors.

Add a paragraph as follows:

- (1) When direct buried cables or conductors cross or are installed parallel to, sewers, water lines, gas or other fuel lines, steam lines, communication and other electric cables or conductors, a twelve (12) inch (300 mm) radial separation shall be maintained.

23.30.310.13 Conductor construction and applications.

Amend by adding the following sentence to the end of the section:

Thermoplastic type insulation shall not be installed when the temperature is less than -7C (20F).

23.30. 330.40 Insulating bushing.

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

An insulated bushing or its equivalent protection shall be provided between the conductors and the outer metal sheath and must be visible for inspection.

23.30. 334.10 Uses permitted.

Delete the following subsection:

- (3) Other structures permitted to be of Types III, IV and V construction except as prohibited in 334.12. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

23.30.334.12 Uses not permitted.

Add subsection "e." to (A)(10):

- e. When the temperature in a building is lower than -7 C (20 F), non-metallic sheathed cable shall not be installed.

23.30.334.104 Conductors.

Replace the section with:

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. Conductors supplying receptacles shall be minimum size 12 AWG copper conductors or sizes 10 AWG with aluminum or copper-clad aluminum conductors. The signaling conductors shall comply with 780.5. The communication conductors shall comply with Part V of Article 800.

23.30.362.12 Uses not permitted.

Add a subsection (11):

- (11) When the temperature in a building is lower than -7C (20F), electrical non-metallic tubing shall not be installed nor have wires installed in it.

23.30.410.8 Fixtures in clothes closets.

Add a section (e):

- (e) Other closet or storage spaces: Luminaries (fixtures) shall meet the location requirements for clothes closets or be of a totally enclosed florescent.

23.30.445.18 Disconnecting means required for generators.

Add a sentence to the end of the section as follows:

Generator disconnecting means shall conform to the requirements of 23.30.230.70(A)(1) and 23.30.230.70(A)(3).

23.30.511.3 Classifications of locations.**511.3(A)(3) Specific areas adjacent to classified locations.**

Replace section with:

- (4) Areas Adjacent to Defined Locations or with Positive-Pressure Ventilation. Areas adjacent to defined locations in which flammable vapors are not likely to be released, such as stock rooms, switchboard rooms, and other similar locations, shall not be classified in existing buildings where designed with positive air pressure or where effectively cut off by walls or partitions.

511.3(A)(5) Up to a Level of 450mm(18in.) Above the Floor in Lubrication or

Service rooms Where Class I Liquids Are Transferred.
Delete the entire section.

511.3(A)(7) Within 450mm (18) of the ceiling.

Revise by adding the word “existing” to make (A) (7) read:

- (7) In existing major repair garages, where lighter than air gaseous fuels (such as natural gas or hydrogen) vehicles are repaired or stored, the area within 450 mm (18 in.) of the ceiling shall be considered unclassified where ventilation of at least 1 cfm/sq ft of ceiling area taken from a point within 450 mm (18 in.) of the highest point in the ceiling is provided.

511.3(B)(3) Lubrication or Service Room Where Class I Liquids or Gaseous Fuels (Such as Natural Gas, or Hydrogen, or LPG) Are Transferred.

Delete the words “that are not designed in accordance with 511.3(A)(5)” from the first portion of the first sentence so that it reads “The following spaces shall be classified as follows”.

511.3(B) (4) Within 450mm (18) of the ceiling.

Delete the words “that are not designed in accordance with 511.3(A) (7)” so the last portion of the sentence reads: “ceiling spaces shall be classified as Class I, Division 2”.

CHAPTER 23.45 LOCAL AMENDMENTS TO THE INTERNATIONAL FIRE CODE 2006 EDITION

Sections

23.45.100	Local amendments to the International Fire Code, 2006 Edition
23.45.102.1	Construction and design provisions
23.45.105.1.2	Types of permit
23.45.105.6	Required operational permits
23.45.308.3.1	Open-flame cooking devices
23.45.308.3.1.1	Liquefied-petroleum-gas-fueled cooking devices
23.45.311.1.1	Abandoned premises
23.45.401.3	Emergency forces notification
23.45.405	Emergency evacuation drills
23.45.405.10	False alarm
23.45.408.5.4	Drill frequency
23.45.408.10	Group R-4 occupancies
23.45.508.2	Type of water supply
23.45.508.5.4	Obstruction
23.45.901	General
23.45.901.6.2	Records
23.45.903.2.2	Group E

1	23.45.903.2.5	Group I
2	23.45.903.2.7	Group R
3	23.45.903.2.10.1	Stories and basements without openings
4	23.45.903.2.12	Other hazards
5	23.45.903.3.1.1.1	Exempt locations
6	23.45.903.3.5	Water supplies
7	23.45.903.4.1	Signals
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9	23.45.907.2.1	Group A
10	23.45.907.2.2	Group B
11	23.45.907.2.4	Group F
12	23.45.907.2.7	Group M
13	23.45.907.2.8.1	Manual fire alarm system
14	23.45.907.2.9	Group R-2
15	23.45.907.15	Monitoring
16	23.45.908.7	Carbon monoxide detectors
17	23.45.1003.1	Applicability
18	23.45.1008.1.8.6	Delayed egress locks
19	23.45.1019.1	Minimum number of exits
20	23.45.1026.1	General
21	23.45.1028	Maintenance of the means of egress
22	23.45.1102.1	Definitions
23	23.45.2211.2.3	Drainage and disposal of liquids and oil-soaked waste
24	23.45.2403.5	Use period
25	23.45.3404.2.13.1.3	Out of service for one year
26	23.45.APPENDIX D	Section D104.1

23.45.100 Local amendments to the International Fire Code, 2006 Edition.

The amendments to the 2006 Edition of the International Fire Code are listed hereinafter by section. The last digits of the section number (after the title and chapter digits) refer to the section of the International Fire Code to which the amendment applies, i.e., 23.45.103.3.1.1 refers to section 103.3.1.1 of the International Fire Code (2006 Edition). The 2006 International Fire Code and its Appendices, except for Appendix A, shall be adopted as amended.

23.45.102.1 Construction and design provisions.

Add the following to the end of Item 3:

...except in reference to voluntary upgrades, as defined and governed by the adopted International Existing Building Code (IEBC) per AMC 23.65.

23.45.105.1.2 Types of permit.

Delete Item 2, Construction Permit.

23.45.105.6 Required operational permits.

Amend **105.6** as follows:

Delete sections **105.6** and subsections **105.6.1** through **105.6.46**, except tables 105.6.8 and 105.6.20.

Replace **105.6** with the following:

The code official is authorized to issue operational permits for the operations set forth in 105.6.1 through 105.6.17.

Add 17 new subsections as follows:

105.6.1 Amusement buildings. An operational permit is required to operate a special amusement building as defined in Section 202 of this code.

105.6.2 Carnivals and fairs. An operational permit is required to operate a carnival or fair.

105.6.3 Compressed gases. An operational permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in Table 105.6.8.

105.6.4 Connection to municipal fire alarm. An operational permit is required to connect a private fire alarm system to the municipal fire alarm circuit.

105.6.5 Exhibits and trade shows. An operational permit is required to operate exhibits and trade shows.

105.6.6 Explosives. An operational permit is required for the manufacture, storage, handling, sale or use of any quantities of explosives, explosive materials, fireworks or pyrotechnic special effects within the scope of chapter 33.

105.6.7 Hazardous materials. An operational permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in table 105.6.20.

105.6.8 High-pile storage. An operational permit is required to use a building or portion thereof as a high-pile storage area exceeding 500 square feet (46 m²).

105.6.9 Liquid- or gas-fueled vehicles or equipment in assembly buildings. An operational permit is required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings.

105.6.10 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas.

Exception: A permit is not required for individual containers with 500-gallon (1893 L) water capacity or less serving occupancies in Group R-3.

2. Operation of cargo tankers that transport LP-gas.

105.6.11 Open burning. An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

Exception: Recreational fires.

105.6.13 Places of assembly. An operational permit is required to operate a place of assembly with an occupant load of 1000 or more.

105.6.14 Private fire hydrants. An operational permit is required for the removal from service, use or operation of private fire hydrants.

Exception: A permit is not required for a private industry with trained maintenance personnel, private fire brigade or fire department to maintain, test and use private hydrants.

105.6.15 Pyrotechnics special effects material. An operational permit is required for use and handling of pyrotechnic special effects material.

105.6.16 Temporary membrane structures, tents and canopies. An operational permit is required to operate an air-supported temporary membrane structure or tent having an area in excess of 200 square feet (19 m²), or a canopy in excess of 400 square feet (37 m²).

Exceptions:

1. Tents used exclusively for recreational camping purposes.
2. Fabric canopies and awnings open on all sides which comply with all the following:
 - 2.1 Individual canopies shall have a maximum size of 700 square feet (65 m²).
 - 2.2 The aggregate area of multiple canopies placed side by side without a fire break clearance of 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
 - 2.3 A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

105.6.17 Gates and restricted access roads. An operational permit is required to install, maintain, and continue use of gates and restricted access egress on fire department access roads.

23.45.308.3.1 Open-flame cooking devices.

After the words “combustible balconies” add “and decks”.

23.45.308.3.1.1 Liquefied-petroleum-gas-fueled cooking devices.

After the words “combustible balconies” add “and decks”.

23.45.311.1.1 Abandoned premises.

Amend paragraph by deleting reference to “the International Property Maintenance Code”.

23.45.401.3 Emergency forces notification.

Amend by adding new subsection 401.3.4 to read as follows:

23.45.401.3.4 False alarm charges.

The owner of a building containing a fire alarm or fire protection system shall pay a charge in accordance with section AMC section 8.40.040 for each and every false alarm 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.

23.45.405 Emergency evacuation drills.

Amend by adding a new subsection 405.10 to read as follows:

23.45.405.10 False alarm.

False alarms may not be counted as a fire drill for the purposes of this section.

23.45.408.5.4 Drill frequency.

Amend by deleting the last sentence and replacing with:

Drills shall meet the requirements of 23.45.408.10.6

23.45.408.10 Group R-4 occupancies.

Amend by adding new section as follows:

408.10.6 Occupants needing physical assistance.

408.10.6.1 Applicability. The provisions of this section apply to all Groups R-4 and I-1 occupancies where the occupants need physical assistance from staff or others to respond to emergencies.

408.10.6.2 Definitions. 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 1020 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 408.10.6.3.

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 408.10.6.3.

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 408.10.6.3.

408.10.6.3 Fire drills. A fire drill conducted by the fire official or other approved 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 official or other licensing official. The drills shall be conducted six (6) times a year on a bi-monthly basis, with at least two (2) drills conducted during the night when

1 residents are sleeping. Records shall indicate the time taken to reach a point of
2 safety, date and time of the drill, location of simulated fire origin, escape paths
3 used, and comments relating to residents who resisted or failed to participate in
4 the drills. The relation of drill time to evacuation capability is as follows:

- 5 1. Three (3) minutes or less – prompt;
- 6 2. Over three (3) minutes but under 14 minutes – slow; or
- 7 3. Fourteen (14) minutes or more – impractical.

8
9 **408.10.6.4 Evacuation capability and fire protection requirements.** Fire
10 protection requirements of a facility under this section are as follows:

11 **408.10.6.4.1 Prompt evacuation capability.** Evacuation capability of
12 three minutes or less indicates prompt evacuation capability. In facilities
13 maintaining prompt evacuation capability, the requirements of the code for
14 Groups I-1 or R-4 occupancies shall be followed.

15 **408.10.6.4.2 Slow evacuation capability.** Evacuation capability of more
16 than three but less than 14 minutes indicates slow evacuation capability. In
17 facilities maintaining slow evacuation capability, the facility must be
18 protected by (a) an automatic smoke detection system, using addressable
19 smoke detectors, designed and installed in accordance with the provisions
20 of this code and NFPA 72; and (b) an automatic sprinkler system, with
21 quick response or residential sprinklers, installed in accordance with
22 section 903.3.1.2 and NFPA 13R, or 903.3.1.3 and NFPA 13D approved
23 previously to the adoption of this code.

24 **408.10.6.4.3 Impractical evacuation capability.** Evacuation capability of
25 fourteen minutes or more indicates impractical evacuation capability. In
26 facilities maintaining impractical evacuation capability, the facility must be
27 protected by (a) the protections for a facility with slow evacuation
28 capability under Section 408.10.6.4.2; (b) one-half hour fire-resistive
29 construction throughout the facility; and (c) direct egress from sleeping
30 rooms for occupants needing evacuation assistance either (1) to the exterior
31 at grade level, to an exterior porch or landing via a thirty-six (36) inch wide
32 door; or (2) if the sleeping rooms are separated from the rest of the building
33 by smoke partitions installed in accordance with section 710, by egress
34 windows conforming to the provisions of Section 1026.

35
36 **23.45.508.2 Type of water supply.**

37
38 Amend by adding a second paragraph and a new exception to 508.2 to read as follows:

39 The water system shall be designed to the standards of, and have the approval of
40 the water utility providing service in the area. If the water system for a structure
41 is not in an area served by a water utility, it shall meet the standards of the
42 nearest water utility.

43
44 **Exception:** In areas of jurisdiction not served by a water utility, the
45 requirements for water systems as outlined in section 508 need not be met,
46 provided all structures other than structures regulated by the IRC and U

occupancies are at least type A construction as defined in the International Building Code, 2006 Edition, or are provided with an approved sprinkler system in accordance with section 903.3.

23.45.508.5.4 Obstruction.

Amend by adding a third sentence at the end of the paragraph to read as follows:

No vehicle shall be parked within fifteen (15) feet of the front and ten (10) feet of the sides of a fire hydrant, fire department connection, or fire protection control valve on private or public property.

23.45.901 General.

Add a new subsection to read as follows:

901.10 Damage protection. When exposed to probable vehicular damage due to proximity to alleys, driveways or parking areas, standpipes, post indicator valves and sprinkler system or standpipe system, connections, shall be protected in an approved manner.

23.45.901.6.2 Records.

Add a new subsection 901.6.2.2 to read as follows:

901.6.2.2 Records. A copy of all inspection reports required by this section shall be sent to the Fire Prevention Division.

23.45.903.2.2 Group E.

Delete 903.2.2 and replace with the following:

An automatic sprinkler system shall be provided throughout all buildings that contain a Group E occupancy and for every portion of educational buildings below the level of exit discharge. The use of a fire wall does not establish a separate building for purposes of this section.

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

Daycare uses licensed to care for more than five (5) persons between the hours of 10 p.m. and 6 a.m. shall be equipped with an automatic sprinkler system designed and installed in accordance with subsection 903.3.1 or an approved equivalent system.

23.45.903.2.5 Group I.

Delete exception and replace with:

Exception: Group I-1 facilities shall be protected throughout with an automatic sprinkler system designed and installed in accordance with 903.3.1.1 or 903.3.1.2. Existing group I-1 facilities with a previously approved and

1 installed sprinkler systems designed in accordance with NFPA 13D and 903.3.1.3
2 shall be considered as in compliance.

3
4 **23.45.903.2.7 Group R.**

5
6 Amend section by adding a new sentence to read as follows:

7 Any Group R-4 occupancy meeting the requirements for construction as defined
8 for group R-3 or constructed in accordance with the IRC shall be sprinklered
9 according to the requirements of 903.3.1.2.

10
11 **23.45.903.2.10.1 Stories and basements without openings.**

12
13 Amend paragraph by deleting the words:

14 "where the floor area exceeds 1,500 square feet and"

15
16 **23.45.903.2.12 Other hazards.**

17
18 Amend by adding the following subsection:

19 **903.2.12.3 Pit sprinklers.** Sprinklers shall be installed in the bottom of all new
20 and existing elevator pits below the lowest projection of the elevator car but no
21 higher than 24" from the bottom of the pit.

22
23 **23.45.903.3.1.1.1 Exempt locations.**

24
25 Amend by adding the following:

- 26 5. **Machine rooms, machine spaces, control rooms, and control spaces.**
27 Sprinkler heads, non-elevator related equipment, and unrelated piping,
28 shall not be installed in new and shall be removed from existing elevator
29 machine rooms, machine spaces, control rooms, and control spaces.

30
31 **23.45.903.3.5 Water supplies.**

32
33 Add a new subsection as follows:

34 **903.3.5.3 Hydraulic calculations.** Sprinkler system design shall include a
35 minimum 15% safety factor for flow at the supply.

36
37 **23.45.903.4.1 Signals.**

38
39 Amend section by adding a new sentence to read as follows:

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

43
44 **23.45.903.6.2 Alterations and additions to E occupancies.**

45
46 Add a new subsection to read as follows:

903.6.2 Alterations and additions to E occupancies. An approved automatic sprinkler system shall be installed throughout all buildings containing a group E occupancy in accordance with section 903.2.2 whenever an addition or a level 2 alteration is made to an existing structure containing an E Occupancy.

23.45.907.2.1 Group A.

Delete Exception.

23.45.907.2.2 Group B.

Delete Exception.

23.45.907.2.4 Group F.

Delete Exception.

23.45.907.2.7 Group M.

Delete Exception #2.

23.45.907.2.8.1 Manual fire alarm system.

Delete Exception #2.

23.45.907.2.9 Group R-2.

Amend first paragraph to read as follows:

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

Amend by deleting exception # 2.

23.45.907.15 Monitoring.

Amend by adding a new subsection to read as follows:

907.15.1 Connection to municipal fire alarm circuit.

- A. A person having a private fire alarm system for one building may connect the system to a municipal fire alarm circuit, or directly connect the system to the fire department communications center, after obtaining a permit for the connection from the fire chief. The fire chief may issue a permit for the connection if it is determined the connection:
 1. Is compatible with the municipal fire alarm circuit or system.
 2. Connects an adequate, properly installed and maintained private alarm system.
 3. Substantially benefits the municipal fire prevention system.
- B. The permit required by this section shall be issued subject to the Fire Department rules and regulations and shall be conditional upon such reasonable requirements, terms and conditions as the fire chief may require.

- 1
2 C. A permit may be revoked by the fire chief for noncompliance with the
3 permit standards, rules, regulations, conditions, or restrictions. The permit
4 may be revoked by the fire chief if, in the fire chief's discretion, it is
5 found the disconnection of the private alarm system is in the best interests
6 of the Municipality. The permit holder may appeal a decision to revoke a
7 permit to the Building Board.
8
9 D. The permit holder shall pay the Municipality for the cost of a radio fire
10 alarm box or for covering an existing radio fire alarm box, and for the
11 cost of the initial hookup (one box per building). The permit holder shall
12 pay the cost of providing, installing and maintaining the private system,
13 up to the radio fire alarm box. The maintenance of the private system
14 shall be by a qualified person engaged in the business of installing and
15 maintaining a supervisory fire alarm system, who shall use NFPA 72 as
16 an installation and maintenance standard.
17
18 E. It shall be unlawful for a person not authorized by the fire chief to
19 connect or disconnect, temporarily or otherwise, a private fire alarm
20 system, or other wires or conduits leading to a municipal fire alarm
21 circuit or municipal fire system. The fire chief shall authorize specific
22 connection or disconnection by written permit.
23
24 F. The permit holder shall pay the following fees for the connection of the
25 private fire alarm system, for one building, to the municipal fire system:
26 1. Permit Fee \$10
27 2. Initial Connection Fee \$150
28 3. Annual Inspection Fee \$1,200
29
30 G. It shall be unlawful for any person, firm, association, or corporation to do
31 any act prohibited under this section or to fail to do any act required
32 under this section. Any person, firm, association, and/or corporation
33 violating this section shall be guilty of a misdemeanor and shall be
34 subject to the penalties and remedies set forth in section 23.10.025.
35

36 **23.45.908.7 Carbon monoxide detectors.**
37

38 Add new section in section 908 Emergency Alarm Systems:

39 **908.7 Carbon monoxide detectors.** The provisions of this section shall apply
40 to Group I-1, R-2, R-3 and R-4 occupancies. At least one (1) carbon monoxide
41 detector shall be installed on each floor level. If a floor level contains bedrooms
42 or sleeping rooms, at least one (1) detector shall be located in the immediate
43 vicinity of the sleeping area, outside of the bedrooms/sleeping rooms.
44

Carbon monoxide detectors shall be listed and installed in accordance with their listing. The alarm shall be clearly audible in all sleeping rooms with intervening doors closed.

Exceptions:

1. Carbon monoxide detectors are not required in dwelling units and structures with no combustion appliances and with no attached garage.
2. Carbon monoxide detectors are not required in dwelling units and structures with only direct vent combustion appliances and with no attached garage.
3. Carbon monoxide detectors are not required in Group I-1 and R-2 occupancies where all combustion equipment is located within a mechanical room separated from the rest of the building by construction capable of resisting the passage of smoke. If the structure has an attached parking garage, the garage shall be ventilated by an approved automatic carbon monoxide exhaust system designed in accordance with the mechanical code.

908.7.1 Interconnection. In new construction, all carbon monoxide detectors located within a single dwelling unit shall be interconnected in such a manner that actuation of one alarm shall activate all of the alarms within the individual dwelling units.

908.7.2 Power source. In new construction, carbon monoxide detectors shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Wiring shall be permanent and without disconnecting switch other than those required for overcurrent protection. Carbon monoxide detectors shall be permitted to be cord-and-plug type with battery backup, or battery powered in existing construction.

23.45.1003.1 Applicability.

Amend section by adding an exception to read as follows:

Exception: Stairs or ladders used only to attend equipment are not considered elements of the means of egress system.

23.45.1008.1.8.6 Delayed egress locks.

Revise item number 3 to read as follows:

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

23.45.1019.1 Minimum number of exits.

Amend section by adding an exception to read as follows:

Exception: Basements or the first level below the first story in all occupancies except R-3, used exclusively for the service of the building may have access to only one (1) exit. For any other use except R-3, the basement or first level below the first story shall have at least two (2) exits arranged in accordance with section 1015.2. For the purpose of this exception, storage rooms, laundry rooms, maintenance offices and similar uses shall not be considered as providing service to the building.

23.45.1026.1 General.

Amend section 1026.1 by deleting all exceptions, except numbers 5 and 6.

23.45.1028 Maintenance of the means of egress.

Add the following section:

1028.8 Protection from falling snow and ice. Where the accumulation of snow and/or ice on a structure creates a hazardous condition, the areas below the accumulation shall be protected from falling snow and/or ice. These areas shall include (but not be limited to) building entrances and exits, pedestrian areas, parking lots, driveways, public right-of-way, children's play areas, and utility locations for gas meters, fire department connections, and electrical meters, services and disconnects.

23.45.1102.1 Definitions.

The first sentence of the definition of "**Airport**" is revised to delete the words:

"with an overall length greater than 39 feet (11887mm) and an overall exterior fuselage width greater than 6.6 feet (2012mm)."

23.45.2211.2.3 Drainage and disposal of liquids and oil-soaked waste.

Subsection 2211.2.3, first paragraph of the International Fire Code is revised by adding a sentence to read:

"Where oil separators or traps are provided, neither the oil nor water phase may drain to septic systems, dry wells, or other means of underground discharge."

23.45.2403.5 Use period.

Add a new exception to read as follows:

Exception: Seasonal Use Structures permitted under AMC section 23.10.104.2.

23.45.3404.2.13.1.3 Out of service for one year.

Amend by adding new sentence at the end of the paragraph to read as follows:

This shall not apply to residential R-3 occupancies (single family and duplex) properties.

23.45.APPENDIX D Section D104.1.

Amend by deleting "three" after shall have at least and adding "two."

CHAPTER 23.55 FIRE PROTECTION SERVICE OUTSIDE SERVICE AREAS**Sections**

23.55.100	Definitions
23.55.200	Policy
23.55.300	Implementation
23.55.400	Cost of services
23.55.500	Responsibility for payment
23.55.600	Enforcement

23.55.100 Definitions.

Whenever the term "municipally financed fire protection" is used, it shall include services received from the Municipality of Anchorage Fire Department, and other service areas offering tax-supported fire-protection services.

- A. Accidental alarm means an alarm set off and transmitted through accidental operation of an automatic or manual fire alarm device, frequently caused by low air pressure on an automatic fire-extinguishing system, dry valves, excessive heat due to industrial processes or cold weather.
- B. Call out means the initial response of a fire department to a report of a fire.
- C. Needless alarm means an alarm of fire apparently given in good faith which proves to be needless because fire department assistance was not required.

23.55.200 Policy.

The policy of the municipality is to provide fire protection within service areas to the maximum extent possible within the budgets approved by the Assembly and supported by taxes raised within the service areas. Further, the municipality recognizes a supplementary obligation to protect lives and property from destruction by fire in areas of the municipality which do not support fire protection services by taxes or voluntary contributions sufficient to maintain a volunteer fire department capable of responding adequately to all calls twenty-four (24) hours per day, seven (7) days per week throughout the year.

23.55.300 Implementation.

The mayor is authorized to permit the use of municipally financed fire protection services outside of the areas providing tax or other adequate support for the services on the following conditions:

- A. The first obligation is to areas furnishing tax support, and the service to the outside areas shall not jeopardize the service to the areas furnishing tax support,

- B. The second obligation is to areas which voluntarily contribute to the maintenance of a 24-hour-per-day, seven-day-per-week fire department.
- C. The third obligation is to other areas.

23.55.400 Cost of services.

- A. In areas outside of fire service areas, \$500.00 shall be charged for call out of the Fire Department. After the first hour, hourly rates for each piece of fire apparatus used in suppressing the fire shall be charged in accordance with the following:

1. Pumper: \$75.00 per hour;
2. Tanker: \$75.00 per hour;
3. Brush tank: \$75.00 per hour;
4. Bulldozer: \$75.00 per hour.

23.55.500 Responsibility for payment.

- A. The responsibility for payment of the charges in section 23.55.040 shall rest jointly and severally upon the following:

1. Owners of the property upon which the fire originated;
2. Tenants of the property upon which the fire originated;
3. Persons residing on the property upon which the fire originated; and
4. Any person legally responsible for the fire by reason of negligence or otherwise.

- B. For the purpose of this section only, the term "fire" is meant to include not only fires but any action or omission to act which results in a needless or accidental alarm.

23.55.600 Enforcement.

The municipality shall have the right to bring suit for the collection of these charges, plus costs and attorneys' fees, against any or all of the parties responsible for payment.

CHAPTER 23.60 LOCAL AMENDMENTS TO THE INTERNATIONAL ENERGY CONSERVATION CODE 2006 EDITION

Sections

23.60.100	Local amendments to the International Energy Conservation Code 2006 Edition
23.60.202	General definitions
23.60.401.2	Compliance
23.60.402.1.1	Insulation and fenestration criteria
23.60.402.1.3	U-factor alternative
23.60.402.2.1	Ceilings with attics
23.60.402.2.3	Mass walls
23.60.402.3.7	Glazing limitation
23.60.402.5	Moisture control

1	23.60.403.3	Mechanical system piping insulation
2	23.60.403.2.2	Sealing
3	23.60.403.6	Equipment sizing
4	23.60.404.3	Performance based compliance
5	23.60.Table 502.2(1)	
6	23.60.502.4.2	Curtain wall, storefront glazing and commercial entrance
7		doors
8	23.60.502.4.3	Sealing the building envelope
9	23.60.502.5	Moisture control
10	23.60.503.1	General
11	23.60.503.2.2	Equipment and system sizing
12	23.60.503.2.4.3	Off-hour controls
13	23.60.503.2.4.4	Shutoff damper controls
14	23.60.503.2.6	Energy recovery ventilation systems
15	23.60.503.2.7.1.3	High-pressure duct systems
16	23.60.503.2.8	Piping insulation
17	23.60.Table 503.2.8	Minimum pipe insulation
18	23.60.503.2.9	HVAC system completion
19	23.60.503.3.2	Hydronic system controls
20	23.60.503.4.2	Variable air volume (VAV) fan control
21	23.60.503.4.3.4	Part load controls
22	23.60.503.4.3.5	Pump isolation
23	23.60.503.4.5	Requirements for complex mechanical systems serving
24		multiple zones
25	23.60.504.3	Temperature control
26	23.60.505.1	General
27	23.60.505.2.2.1	Light reduction controls
28	23.60.505.2.2.2	Automatic lighting shutoff
29	23.60.505.5	Interior lighting power requirements
30	23.60.505.5.1	Total connected interior lighting power
31	23.60.505.6	Exterior lighting
32	23.60.505.7	Electrical energy consumption

23.60.100 Local amendments to the International Energy Conservation Code 2006 Edition.

The amendments to the 2006 edition of the International Energy Conservation Code are listed hereafter by section. The last digits of the number (after the title and chapter digits) are the sections of the International Energy Conservation Code to which the amendments refer.

23.60.202 General definitions.

Vapor Retarder. Amend definition by replacing 1 perm with 0.06 perms.

23.60.401.2 Compliance.

Amend section 401.2 by adding the following exception:

Exception: Projects that comply with the International Residential Code as amended under AMC chapter 23.45.

23.60.402.1.1 Insulation and fenestration criteria.

Delete Table 402.1.1 and replace with 23.60.Table 402.1.1.

23.60.Table 402.1.1 Insulation and Fenestration Minimum R-Values by Component							
Climate Zone	Windows & Skylights	Ceiling ^a	Exterior Frame Wall	Floor	Below Grade Wall ^b	Slab ^c & Depth	Crawl Space Wall ^b
7	3	49 or 38	20	30	15/19	10, 4ft	15/19

- a. The smaller value may be used with a properly sized, energy-heel truss.
- b. The first R-value applies to continuous insulation, the second to framing cavity insulation; either meets the requirement.
- c. R-5 shall be added to the required slab edge R-values for heated slabs.

23.60.402.1.3 U-factor alternative.

Delete Table 402.1.3 and replace with 23.60.Table 402.1.3

23.60.Table 402.1.3 Insulation and Glazing Maximum U-Factors by Component ^d							
Climate Zone	Windows & Skylights	Ceiling ^a	Exterior Frame Wall	Floor	Below Grade Wall ^b	Slab	Crawl Space Wall ^c
7	0.33	0.020	0.053	0.033	0.067/0.053	0.10	c

- a. The larger factor of 0.0263 may be used with a properly sized, energy-heel truss.
- b. The first U-factor applies to continuous insulation, the second to framing cavity insulation; either meets the requirement.
- c. See below grade wall factors.
- d. Nonglazing U-factors shall be obtained from measurement, calculation, or an approved source.

23.60.402.2.1 Ceilings with attics.

Amend section 402.2.1 by adding the following exception:

Exception: R-38 fiberglass blanket insulation may be compressed at the eave to provide a 1.5 inch air space when installed between wood trusses having a minimum heel height of 11.25 inches.

23.60.402.2.3 Mass walls.

Delete section 402.2.3 Mass Walls.

23.60.402.3.7 Glazing limitation.

Add the following section:

402.3.7 Glazing limitation. Glazing shall be limited to 18% of the conditioned floor area.

23.60.402.5 Moisture control.

Delete section 402.5 Moisture Control, and replace with the following:

402.5 Moisture control (Mandatory). The building design shall not create conditions of accelerated deterioration from moisture condensation. Walls, floors, ceilings, crawl space walls, crawl space floors and concrete slabs shall incorporate an approved, continuous, vapor retarder. The vapor retarder shall be installed on the warm side of the insulation.

Lap and seal all seams with approved tape or sealant.

Insulate and seal voids between joists in an approved manner.

Exceptions:

1. In construction where moisture or its freezing will not damage materials.
2. One-third of total installed insulation may be installed on the warm side of vapor retarders.

23.60.403.3 Mechanical system piping insulation.

Insert the following exception under section 403.3:

Exception: piping installed within the building thermal envelope.

23.60.403.2.2 Sealing.

Delete “section M1601.3.1 of the International Residential Code” and replace with “the International Mechanical Code, as amended under AMC chapter 23.20”.

23.60.403.6 Equipment sizing.

Delete “in accordance with section M1401.3 of the International Residential Code” and replace with “based on design loads determined in accordance with the procedures described in ASHRAE Fundamentals Handbook, or other approved equivalent computational procedures. Oversizing should be limited to 15% of the design load.”

23.60.404.3 Performance based compliance.

Add the following exception:

Exception: Compliance may be demonstrated through a home energy rating under a program approved by the Alaska Housing Finance Corporation (AHFC) that meets the following:

1. A minimum four star plus rating is required.
2. The maximum air infiltration rate shall not exceed seven air changes per hour at 50 pascals pressure difference.
3. The compliance rating shall be performed by a person authorized by AHFC.

Compliance with sections 404.4 through 404.6 is not required.

23.60.Table 502.2(1).

Amend Table 502.2(1) by replacing “NR” for unheated slabs in climate zone 7 with “R-10 for 36 in. below”.

23.60.502.4.2 Curtain wall, storefront glazing and commercial entrance doors.

Amend section 502.4.2 by adding the following sentence:

Curtain wall and store front systems shall incorporate exterior openings for ventilation and drainage.

23.60.502.4.3 Sealing the building envelope.

Amend section 502.4.3 by adding the following sentences:

This does not include required moisture channels and exterior openings for ventilation and drainage in curtain wall and store front systems. These shall be maintained open and functional.

23.60.502.5 Moisture control.

Delete section 502.5 Moisture Control, and replace with the following:

502.5 Moisture control (Mandatory). The building design shall not create conditions of accelerated deterioration from moisture condensation. Walls, floors, ceilings, crawl space walls, crawl space floors and concrete slabs shall incorporate an approved, continuous, vapor retarder. The vapor retarder shall be installed on the warm side of the insulation.

Lap and seal all seams with approved tape or sealant.

Insulate and seal voids between joists in an approved manner.

Exceptions:

1. In construction where moisture or its freezing will not damage materials.
2. One-third of total installed insulation may be installed on the warm side of vapor retarders.

23.60.503.1 General.

Amend section 503.1 by adding the following exception:

Exception: Additions, alterations, or repairs to existing buildings.

23.60.503.2.2 Equipment and system sizing.

Amend section 503.2.2 by adding exception number 3 as follows:

3. Heating equipment may be oversized by up to 20 percent.

23.60.503.2.4.3 Off-hour controls.

Amend section 503.2.4.3 by adding exception number 3 as follows:

3. Simple systems as defined under Section 503.3, where no cooling system is installed.

23.60.503.2.4.4 Shutoff damper controls.

Amend section 503.2.4.4 by adding exception number 4 as follows:

4. Motorized dampers shall not be required for exhaust systems where grease, lint, and similar particulates may accumulate on the damper and create a fire hazard.

23.60.503.2.6 Energy recovery ventilation systems.

Amend section 503.2.6 by adding exceptions numbered 9 and 10 as follows:

9. Where grease, lint, and similar particulates may accumulate on heat recovery coils, plates, and similar components and create a fire hazard.
10. Where the system does not operate continuously and is controlled only to operate under a safety operation such as carbon monoxide exhaust systems in garages and smoke evacuation systems.

23.60.503.2.7.1.3 High-pressure duct systems.

Amend section 503.2.7.1.3 by deleting the last sentence stating "Documentation shall be furnished by the designer demonstrating..."

23.60.503.2.8 Piping insulation.

Amend section 503.2.8 by adding exception number 5 as follows:

4. Piping within baseboard radiation assemblies and piping that is intended to serve as a terminal heating device.

23.60.Table 503.2.8 Minimum pipe insulation.

Amend the insulation thickness in Table 503.2.8 as follows:

Steam:	pipe diameter 1.5 inch or less = 1 inch
	pipe diameter greater than 1.5 inch = 2 inch
Hot Water:	All pipe sizes = 1 inch.
Chilled Water:	All pipe sizes = 1 inch.

23.60.503.2.9 HVAC system completion.

Delete section 503.2.9.

23.60.503.3.2 Hydronic system controls.

Amend section 503.3.2 as follows:

“Hydronic systems of at least 500,000 Btu/h design output capacity supplying heated or chilled water to comfort conditioning systems shall include controls that meet the requirements of 503.4.3.”

23.60.503.4.2 Variable air volume (VAV) fan control.

Amend section 503.4.2 by deleting the last sentence stating “For systems with direct digital control of individual zone boxes...”

23.60.503.4.3.4 Part load controls.

Amend section 503.4.3.4 by replacing 300,000 Bth/h with 500,000 Btu/h, and adding an exception as follows:

Exception: Where the hydronic system serves domestic hot water generation equipment or other equipment that requires a consistent supply temperature and is not applicable to fluid temperature setback control.

23.60.503.4.3.5 Pump isolation.

Delete section 503.4.3.5.

23.60.503.4.5 Requirements for complex mechanical systems serving multiple zones.

Amend section 503.4.5 by adding item number 7 to the exception, as follows:

7. Supply air systems less than 10,000 CFM in capacity.

23.60.504.3 Temperature control.

Delete section 504.3.

23.60.505.1 General.

Amend section 505.1 by adding exception number 2 as follows:

2. Additions, alterations, or repairs to an existing building.

23.60.505.2.2.1 Light reduction controls.

Amend section 505.2.2.1 as follows:

Revise Exception number 3 to read:

- 3 Corridors, storerooms, restrooms, public lobbies, and similar common and/or normally unoccupied spaces.

Add exception number 6 as follows:

6. Areas where HID lighting is utilized as the primary light source.

23.60.505.2.2.2 Automatic lighting shutoff.

Amend section 505.2.2.2 by replacing the first sentence with the following:

Occupied areas exceeding 5000 square feet (465 square meters) and under the control of a single occupant, owner, or tenant shall be equipped with an automatic control device to shutoff lighting.

23.60.505.5 Interior lighting power requirements.

Amend section 505.5 by replacing the first sentence with the following:

A building complies with this section if its total connected lighting power calculated under section 505.5.1 is no greater than 150 percent of the interior lighting power calculated under section 505.5.2.

23.60.505.5.1 Total connected interior lighting power.

Amend section 23.60.505.5.1 by adding exception number 6 as follows:

6. Theatrical and special effects lighting.

23.60.505.6 Exterior lighting.

Revise section 505.6 as follows:

505.6 Exterior lighting (Mandatory). When the power for the exterior lighting is supplied through the energy service to the building, all exterior lighting, other than low voltage lighting, shall have a source efficacy of at least 45 lumens per Watt. Fixtures employing lamps rated over 100 Watts shall either have a source efficacy of at least 60 lumens per Watt or be controlled by a motion sensor.

Exceptions:

1. Where approved because of historical, safety, signage or emergency considerations.
2. Light Emitting Diode (LED), neon, and cold cathode exterior lamp sources.
3. Where specific lighting levels are required by state or local governmental criteria, the state or local code shall prevail. Areas affected by this exemption may include, but are not limited to, ATM's and parking garage emergency lighting.
4. Theatrical and special effects lighting.

Delete sections 505.6.1 and 505.6.2.

23.60.505.7 Electrical energy consumption.

Revise section 505.7 by adding the following exceptions:

Exceptions:

1. Transient occupancies such as dormitories, barracks, guest suites in hotels and motels, and similar type facilities.
2. Assisted living facilities, long term extended care facilities and similar facilities under the management and supervision and a single agency.

**CHAPTER 23.65 LOCAL AMENDMENT TO THE 2006 INTERNATIONAL
EXISTING BUILDING CODE**

Sections

23.65.100	Local amendments to the International Existing Building Code, 2006 edition
23.65.101.5.2	Work area compliance method
23.65.103-117	Delete sections
23.65.302.2	Structural
23.65.303.2.3.2	Alterations
23.65.305.4	Structural
23.65.307	Moved structures
23.65.606	Structural
23.65.704.2	Automatic sprinkler systems
23.65.705.4.4	Panic hardware
23.65.707	Structural
23.65.807	Structural
23.65.907	Structural
23.65.1003	Structural
23.65.1202.3	Wind loads
23.65.1202.4	Seismic loads
23.65.1202.5	Snow loads
23.65.1301.4.1	Structural analysis
23.65	Appendix A

**23.65.100 Local amendments to the International Existing Building Code,
2006 edition.**

The amendments to the 2006 Edition of the International Existing Building Code are listed hereafter by section. The last digits of the number (after the title and chapter digits) are the sections of the International Existing Building Code to which the amendments refer.

23.65.101.5.2 Work area compliance method.

Add the following to the end of the paragraph:

Where structural provisions have been deleted by amendment from chapters 6, 7, 8, 9, and 10, compliance shall be to the structural provisions of chapter 3.

23.65.103-117 Delete sections:

Delete IEBC sections 103 through 117. Refer to the Anchorage Administrative Code

23.65.302.2 Structural.

In the first paragraph, revise "5 percent" to read "10 percent".

23.65.303.2.3.2 Alterations.

Revise “5 percent” to read “10 percent”.

23.65.305.4 Structural.

Replace the first paragraph to read as follows:

When a change of occupancy results in a higher seismic occupancy factor based on Table 1604.5 of the *International Building Code*; or where such change of occupancy results in a reclassification of a building to a higher hazard category as shown in Table 912.4, the building shall conform to the seismic requirements of the *International Building Code* for the new seismic use group.

Add a new paragraph after the Exceptions to read as follows:

Buildings or portions thereof subject to a change of occupancy where such change in the nature of occupancy results in higher uniform or concentrated loads based on Tables 1607.1 and 1607.6 of the *International Building Code* shall comply with the gravity load provisions of the *International Building Code*.

Exception: Structural elements whose stress is not increased by more than 10 percent.

23.65.307 Moved structures.

Delete in its entirety.

23.65.606 Structural.

Delete in its entirety.

23.65.704.2 Automatic sprinkler systems.

Amend section 704.2.2 by deleting the reference to Group E occupancies.

Add the following subsection:

23.65.704.2.2.2 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.

23.65.705.4.4 Panic hardware.

Amend section 705.4.4 by changing the number 100 to 49.

23.65.707 Structural.

Delete in its entirety.

23.65.807 Structural.

Delete in its entirety.

23.65.907 Structural.

Delete in its entirety.

23.65.1003 Structural.

Delete in its entirety.

23.65.1202.3 Wind loads.

In Exception 2, revise "5 percent" to read "10 percent".

23.65.1202.4 Seismic loads.

In Exception 2, revise "5 percent" to read "10 percent".

23.65.1202.5 Snow loads.

In the Exception, revise "5 percent" to read "10 percent".

23.65.1301.4.1 Structural analysis.

Add the following to the end of the sentence:

"or shall comply to the structural provisions of chapter 3."

23.65 Appendix A.

Adopt Appendix A.

CHAPTER 70 ABATEMENT OF DANGEROUS BUILDINGS.**Sections**

Section 23.70.701	Purpose and scope
Section 23.70.702	Definitions.
Section 23.70.703	Administration.
Section 23.70.704	Notices and orders
Section 23.70.705	Notice to vacate.
Section 23.70.706	Appeal
Section 23.70.707	Performance of work, repair, demolition or removal by owner
Section 23.70.708	Enforcement by code official
Section 23.70.709	Emergency abatement by code official
Section 23.70.710	Recovery of costs by code official

Section 23.70.701 Purpose and scope.**23.70.701.1 Purpose.**

- A. It is the purpose of this chapter to provide a just, equitable and practicable method, to be cumulative with and in addition to any other remedy provided by the codes, or otherwise available by law, whereby buildings or structures which from any cause endanger the life, limb, health, morals, property, safety or welfare of the general public or their occupants shall be required to be repaired, demolished or removed.
- B. The purpose of this chapter is not to create or otherwise establish or designate any particular class or group of persons who shall or should be especially protected or benefited by the terms of this chapter.

1 **23.70.701.2 Scope.** The provisions of this chapter shall apply to all dangerous
2 buildings or structures, as defined in section 702, now in existence or which may
3 hereafter become dangerous in this jurisdiction.
4

5 **23.70.701.3 Abatement of dangerous building standards.** All buildings or
6 structures required to be repaired under the provisions of this chapter shall be
7 subject to the provisions of the International Existing Building Code, as adopted
8 by the Municipality of Anchorage.
9

10 **Section 23.70.702 Definitions.**

11 **23.70.702.1 General.** For the purpose of this chapter, certain terms, phrases,
12 words and their derivatives shall be construed as specified in either this chapter
13 or as specified in the code. Where terms are not defined, they shall have the
14 ordinary accepted meanings within the context with which they are used.
15 Webster's Dictionary shall be construed as providing ordinary accepted
16 meanings. Words used in the singular include the plural and the plural the
17 singular. Words used in the masculine gender include the feminine and the
18 feminine the masculine.
19

20 ***Abatement*** is the code compliant corrections of all conditions or defects
21 described in section 702, as confirmed by the code official.
22

23 ***Beyond Economic Feasibility to Repair*** is when the estimated cost of repair
24 exceeds the estimated replacement cost of the entire structure.
25

26 ***Code or Codes*** are the relevant codes, as adopted by this jurisdiction.
27

28 ***Code Official*** is the building official or designee.
29

30 ***Dangerous Building*** is, for the purpose of this chapter, any building or structure
31 with any or all of the conditions or defects hereinafter described to such an extent
32 the condition endangers life, limb, health, morals, property, safety, or welfare of
33 the general public or its occupants.

- 34 1. Whenever any door, aisle, passageway, stairway or other means of exit is
35 not of sufficient width or size or is not so arranged as to provide safe and
36 adequate means of exit in case of fire or panic.
37 2. Whenever the walking surface of any aisle, passageway, stairway or other
38 means of exit is so warped, worn, loose, torn or otherwise unsafe as to not
39 provide safe and adequate means of exit in case of fire or panic.
40 3. Whenever the stress in any materials, member or portion thereof, due to
41 all dead and live loads, is more than one and one half times the working
42 stress or stresses allowed in the code for buildings of similar structure,
43 purpose or location.
44 4. Whenever any portion thereof has been damaged by fire, earthquake,
45 wind, flood or by any other cause, to such an extent the structural strength
46 or stability thereof is materially less than before such catastrophe and is

- less than the minimum requirements of the code for buildings of similar structure, purpose or location.
5. Whenever any portion or member or appurtenance thereof is likely to fail, or to become detached or dislodged, or to collapse and thereby injure persons or damage property.
 6. Whenever any portion of a building or structure, or any member, appurtenance or ornamentation of the exterior thereof is not of sufficient strength or stability, or is not so anchored, attached or fastened in place so as to be capable of resisting a wind pressure of one half of that specified in the code for such buildings or structures.
 7. Whenever any portion thereof has wracked, warped, buckled or settled to such an extent that walls or other structural portions have materially less resistance to winds or earthquakes than is required in the case of similar construction.
 8. Whenever the building or structure, or any portion thereof, because of:
 - a. Dilapidation, deterioration or decay;
 - b. Faulty construction;
 - c. The removal, movement or instability of any portion of the ground necessary for the purpose of supporting such building or structure;
 - d. The deterioration, decay or inadequacy of its foundation; or
 - e. Any other cause, is likely to partially or completely collapse.
 9. Whenever, for any reason, the building or structure, or any portion thereof, is unsafe for the purpose of which it is being used.
 10. Whenever the exterior walls or other vertical structural members list, lean or buckle to such an extent a plumb line passing through the center of gravity does not fall inside the middle one-third of the base.
 11. Whenever the building or structure, exclusive of the foundation, shows thirty-three percent (33%) or more damage or deterioration of its supporting member or members, or fifty percent (50%) damage or deterioration of its non-supporting members, enclosing or outside walls or coverings.
 12. Whenever the building or structure has been so damaged by fire, wind, earthquake or flood, or has become so dilapidated or deteriorated as to become
 - a. An attractive nuisance to children;
 - b. A harbor for vagrants, criminals or immoral persons; or
 - c. Enables persons to resort thereto for the purpose of committing unlawful or immoral acts.
 13. Whenever any building or structure has been constructed, exists or is maintained in violation of any specific requirement or prohibition applicable to such building or structure provided by the building regulations of this jurisdiction, as specified in the code, or of any law or ordinance of this state or jurisdiction relating to the condition, location or structure of buildings.

14. Whenever any building or structure which, whether or not erected in accordance with all applicable laws and ordinances, has in any non-supporting part, member or portion less than fifty (50) percent, or in any supporting part, member or portion, less than sixty-six (66) percent of the
 - a. Strength;
 - b. Fire-resisting qualities or characteristics; or
 - c. Weather-resisting qualities or characteristics required by law in the case of a newly constructed building or structure of like area, height and occupancy in the same location.
 - d. This subsection does not apply to strength required to resist seismic loads.
15. Whenever a building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, faulty construction or arrangement, inadequate light, air or sanitation facilities, or otherwise, is determined by the code official to be unsanitary, unfit for human occupancy or in such a condition it is likely to cause sickness or disease.
16. Whenever any building or structure, because of obsolescence, dilapidated condition, deterioration, damage, inadequate exits, lack of sufficient fire-resistive construction, faulty electric wiring, gas connections or heating apparatus, or other cause, is determined by the code official to be a fire hazard.
17. Whenever any building or structure is in such a condition as to constitute a public nuisance known to the common law or in equity jurisprudence.
18. Whenever any portion of a building or structure remains on a site after the demolition or destruction of the building or structure or whenever any building or structure is abandoned for a period in excess of six months so as to constitute such building or structure or portion thereof an attractive nuisance or hazard to the public.

Habitual means customarily, or by frequent practice or use; it does not mean entirely or exclusively.

Imminent or Immediate means near at hand, or if left unattended, on the point of happening; it is also an observable structural, electrical, mechanical or plumbing failure to the extent a reasonable person may believe it poses a serious threat to life and safety.

Record Owner is any legal interest of record disclosed from official public records.

Unfit for Human Occupancy means a building or structure is unfit for human occupancy whenever the code official finds such structure is unsafe, unlawful or because of the degree to which the building or structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or

other essential equipment required by this code, or because the location of the building or structure constitutes a hazard to the occupants of the building or structure or to the public.

Unlawful Building or Structure is one found in whole or in part to be occupied by more persons than permitted under this code, or was erected, altered or occupied contrary to law.

Unsafe Building or Structure is one found to be dangerous to the life, health, property or safety of the public or the occupants of the building or structure by not providing the minimum safeguards to protect or warn occupants in the event of fire, or because such building or structure contains unsafe equipment or is so damaged, decayed, dilapidated, structurally unsafe or of such faulty construction or unstable foundation, that partial or complete collapse is possible.

Unsafe Equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the premises or within the building or structure in such disrepair or condition that such equipment is a hazard to life, health, property or safety of the public or occupants of the premises, building or structure.

Section 23.70.703 Administration.

23.70.703.1 Authority.

- A. The code official is hereby authorized to enforce the provisions of this chapter.
- B. The code official shall have the power to render interpretations of this chapter and to adopt and enforce rules and supplemental regulations in order to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformity with the intent and purpose of this chapter.

23.70.703.2 Extension of time to perform work. Upon receipt of a written request from the person required to conform to a notice and order and by agreement of such person to comply with the notice and order if allowed additional time, the code official may grant an extension of time, not to exceed an additional one hundred twenty (120) days, within which to complete said repair, demolition or removal, if the code official determines such an extension of time will not create or perpetuate a situation imminently dangerous to life or property. The code official's authority to extend time is limited to the physical repair, demolition or removal of the building or structure and shall not in any way affect the time to appeal the notice and order.

23.70.703.3 Inspections. The health officer, the fire marshal and the code official are hereby authorized to make such inspections and take such actions as may be required to enforce the provisions of this chapter.

1
2
3 **23.70.703.4 Right of entry.** When it is necessary to make an inspection to
4 enforce the provisions of this chapter, or when the code official or the code
5 official's authorized representative has reasonable cause to believe there exists in
6 a building or structure a condition which is contrary to or in violation of this
7 chapter and makes the building or structure dangerous or unlawful, the code
8 official may enter the building or structure at reasonable times to inspect or to
9 perform the duties imposed by this chapter, provided if such building or structure
10 be occupied that credentials be presented to the occupant and entry requested. If
11 such building or structure is unoccupied, the code official shall first make a
12 reasonable effort to locate the owner or other persons having charge or control of
13 the building or structure and request entry. If entry is refused, the code official
14 shall have recourse to the remedies provided by law to secure entry.

15 **23.70.703.5 Abatement of dangerous buildings.** All buildings or structures or
16 portions thereof determined after inspection by the code official to be dangerous
17 or unlawful as defined in this chapter are hereby declared to be public nuisances
18 and shall be abated by repair, demolition, or removal in accordance with this
19 code.

20
21 **23.70.703.6 Violations.** It shall be unlawful for any person, firm or
22 corporation to erect, construct, enlarge, alter, repair, move, improve, remove,
23 convert or demolish, equip, use, occupy or maintain any building or structure or
24 cause or permit the same to be done in violation of this chapter.

25
26 **23.70.703.7 Board of appeals.** In order to hear and decide appeals of orders,
27 decisions or determinations made by the code official relative to the application
28 and interpretations of this chapter, there shall be and is hereby created a board of
29 appeals. The board of appeals for these issues is the Board of Building
30 Regulation Examiners and Appeals (Building Board) as defined in section
31 23.10.204. Appeals to the board shall be processed in accordance with the
32 provisions contained in section 705 of this chapter, and Anchorage Municipal
33 Code of Regulations section 23.10.010.

34
35 **Section 23.70.704 Notices and orders.**

36
37 **23.70.704.1 Commencement of proceedings.** When the code official has
38 inspected a building or structure and determines it is a dangerous or unlawful
39 building, the code official shall commence proceedings to cause the repair,
40 demolition, or removal of the building or structure.

41
42 **23.70.704.2 Notice of violation.** All violations noted by the code official shall
43 receive a notice of violation. A notice of violation shall be posted at the location
44 of the building or structure determined by inspection to have a violation. The
45 code official shall give the owner three (3) business days to meet with the code
46 official to determine the extent of the repair, demolition or removal necessary.

After the three (3) business days, the code official shall determine if a notice and order shall be issued.

23.70.704.3 Notice and order. The code official shall issue a notice and order directed to the record owner of the building or structure. The notice and order shall contain:

- A. The street address and a legal description sufficient for identification of the property upon which the building or structure is located.
- B. A statement the code official found the building or structure to be dangerous or unlawful with a brief and concise description of the conditions found to render the building or structure dangerous or unlawful under the provisions of section 702.
- C. A statement of the action required to be taken as determined by:
 1. If the code official has determined the building or structure must be repaired or removed, the order shall require all required permits be secured therefore and the work physically commenced within sixty (60) days from the date of the order. The repairs shall be completed within such time as the code official shall determine is reasonable under all the circumstances and specified in the Notice and Order.
 2. If the code official has determined the building or structure must be vacated, the order shall require the building or structure shall be vacated within a time certain from the date of the order as determined by the code official to be reasonable and specified in the Notice and Order. The notice to vacate shall be posted as per section 705.
 3. If the code official has determined the building or structure must be demolished, the demolition shall be completed within such time as the code official determines is reasonable and shall be specified on the Notice and Order.
- D. Statements advising if any required repair or demolition work is not commenced within the time specified, the code official:
 1. May order the Notice to Vacate as per section 705, and
 2. May proceed with causing the repair, demolition or removal as per section 708.
- E. Statements advising:
 1. The notice and order may be appealed to the board of appeals as per section 706; and
 2. Failure to appeal shall constitute a waiver of all right to an administrative hearing and determination of the matter.

23.70.704.4 Service of notice and order. The notice and order, and any amended or supplemental notice and order, shall be served upon the record owner and posted on the property. The failure of the code official to serve any person required herein to be served shall not invalidate any proceedings hereunder as to any other person duly served or relieve any such person from any duty or obligation imposed by the provisions of this section.

23.70.704.5 Method of service.

- A. Such notice shall be deemed to be properly served if a copy thereof is:
1. Delivered personally;
 2. Sent by certified or first-class mail addressed to the last known address, return receipt requested; or
 3. Posted in a conspicuous place in or about the structure affected by such notice.

23.70.704.6 Recordation of notice and order.

- A. If the order has not been complied with in the time specified therein, and no appeal has been properly and timely filed, the code official shall file in the Anchorage District Recorder's Office a certificate describing the property and certifying:
1. The building or structure is a dangerous or unlawful building; and
 2. The owner has been so notified.
- B. When the corrections ordered have been completed or the building or structure demolished so it no longer exists as a dangerous or unlawful building or structure on the property described in the certificate, the code official shall file a new certificate with the Anchorage District Recorder certifying the building or structure has been removed, demolished or all required repairs have been made so the building or structure is no longer dangerous or unlawful.

23.70.704.7 Transfer of ownership. It shall be unlawful for the owner of any building or structure who has received a notice and order or notice of violation to sell, transfer, mortgage, lease or otherwise dispose of such building or structure to another until the provisions of the notice and order or notice of violation have been complied with, or until such owner shall first furnish the grantee, transferee, mortgagee or lessee a true copy of any notice and order or notice of violation issued by the code official and shall furnish the code official a signed and notarized statement from the grantee, transferee, mortgagee or lessee, acknowledging the receipt of such notice and order or notice of violation fully accepting the responsibility without condition for making corrections or repairs required by such notice and order or notice of violation.

Section 23.70.705 Notice to vacate.

23.70.705.1 Notice to vacate. The code official may post a building or structure with a notice to vacate if the building or structure is determined by the code official to contain an imminent or immediate life safety violation or condition. A notice to vacate shall be served under the same requirements for a notice and order as section 704.

1 **23.70.705.2 Posting.** Every notice to vacate shall, in addition to being served as
2 provided in section 705.1, be posted at or upon each exit of the building or structure
3 and shall be in substantially the following form:
4

5 **DO NOT ENTER**

6 **UNSAFE TO OCCUPY**

7 **It is a misdemeanor to occupy this building or structure,**
8 **or to remove or deface this notice.**

9 **CODE OFFICIAL**
10

11 **23.70.705.3 No occupancy compliance.** Whenever such notice is posted, the
12 code official shall include a notification thereof in the notice and order issued under
13 section 704, reciting the emergency and specifying the conditions which necessitate
14 the posting. No person shall remain in or enter any building or structure so posted,
15 except entry may be made to repair, demolish or remove such building or structure
16 under permit. No person shall remove or deface any such notice after it is posted until
17 the required repairs, demolition or removal are completed and a certificate of
18 occupancy issued pursuant to the provisions of the code. The code official may assess
19 fines as per 23.10.Table 3-N for each building code violation and the hourly rate for
20 the code officials time as per the code abatement fee for failure to comply.
21

22 **23.70.705.4 Code compliance inspection.** All buildings or structures posted
23 with a notice to vacate shall have a code compliance inspection performed before any
24 permit for repair or removal shall be issued.
25

26 **Section 23.70.706 Appeal.**
27

28 **23.70.706.1 Form of appeal.** Any person entitled to service under sections
29 704 or 705 may appeal any notice and order or any action of the code official under
30 this chapter by submitting an application and the filing fee for an appeal to the
31 Board of Building Regulation Examiners and Appeals at the office of the code
32 official. The appeal shall be filed within thirty (30) days from the date of the
33 service of such order or action of the code official; provided, however, if the
34 building or structure is in such condition as to make it immediately dangerous to
35 the life, limb, health, morals, property, safety or welfare of the general public or
36 their occupants and is ordered vacated and is posted in accordance with section
37 705, such appeal shall be filed within ten (10) days from the date of the service of
38 the notice and order of the code official.
39

40 **23.70.706.2 Processing of appeal.** Upon receipt of any appeal filed pursuant to
41 this section, the code official shall present it at the next regular or special meeting of
42 the board of appeals.
43

44 **23.70.706.3 Scheduling and noticing appeal for hearings.** As soon as
45 practicable after receiving the written appeal, the board of appeals shall fix a date,
46 time and place for the hearing of the appeal by the board. Such date shall not be less

than ten (10) days nor more than sixty (60) days from the date the appeal was filed with the code official. Written notice of the time and place of the hearing shall be given at least ten (10) days prior to the date of the hearing to each appellant by the secretary of the board either by causing a copy of such notice to be delivered to the appellant personally or by mailing a copy thereof, postage prepaid, addressed to the appellant at the address shown on the appeal.

23.70.706.4 Effect of failure to appeal. Failure of any person to file an appeal in accordance with the provisions of section 706 shall constitute a waiver of the right to an administrative hearing and adjudication of the notice and order or any portion thereof.

23.70.706.5 Scope of hearing of appeal. Only those matters or issues specifically raised in the notice and order or actions by any persons with authority under this chapter shall be considered in the appeal hearing.

23.70.706.6 Staying of order under appeal. Except for notice to vacate order made pursuant to section 705, enforcement of any notice and order of the code official issued under this chapter shall be stayed during the appeal therefrom which is properly and timely filed.

Section 23.70.707 Performance of work, repair, demolition or removal by owner

23.70.707.1 Repair, demolition or removal by owner. The following standards shall be followed by the code official in allowing the owner to complete the repair, demolition or removal of any dangerous building or structure:

A. Any building or structure declared a dangerous building or structure under this chapter shall be made to comply by the owner with the following:

1. The building or structure shall be repaired in accordance with the code applicable to the type of substandard conditions requiring repair. All work shall be permitted and inspected according to the code; or
2. The building or structure shall be demolished at the option of the owner. A demolition permit shall be obtained prior to the work being performed; or
3. The building or structure shall be removed at the option of the owner. If building or structure is to be moved to another location within the jurisdiction, a code compliance inspection shall be performed prior to the removal.

Section 23.70.708 Enforcement by code official.

23.70.708.1 General. After any notice and order, board of appeals decision, contract agreement, or extension has been finalized, no person to whom any such order is directed shall fail, neglect, or refuse to obey any such order.

1 **23.70.708.2 Failure to obey order.** If, after any notice and order, board of
2 appeals decision, contract agreement, or extension has been made final, the person to
3 whom such order is directed shall fail, neglect or refuse to comply with such order, the
4 code official may institute any appropriate action to abate such building or structure as
5 a public nuisance.

6
7 **23.70.708.3 Failure to commence work.**

8 A. Whenever the required repair, demolition or removal of building or structure
9 is not commenced within time specified under the notice and order, appeals
10 board action, contract agreement or extension the following becomes
11 effective:

- 12 1. The code official shall cause the building or structure described in
13 such notice and order to be vacated as per section 705.
- 14 2. No person shall remove or deface any such notice so posted until the
15 repairs, demolition or removal ordered by the code official are
16 completed and a certificate of occupancy issued pursuant to the
17 provisions of this code.
- 18 3. The code official may, in addition to any other remedy provided
19 herein, cause the building or structure to be repaired, demolished or
20 removed according to this chapter. The cost of any such repairs,
21 demolition, or removals shall be recovered in the manner provided in
22 this chapter.

23
24 **23.70.708.4 Personal property.** Prior to the time of repair, demolition or
25 removal, the code official has the authority to enter the dangerous building or
26 structure to make an inspection for any personal property of value abandoned on the
27 premises. If such property is discovered, an inventory shall be taken and made part of
28 the case file. If the owner fails to remove the discovered property prior to the
29 demolition, the owner may redeem said property only under the conditions set forth
30 below. At the time of demolition, the demolition contractor has the authority to
31 remove the inventoried abandoned property from the premises and store the same
32 safely. The record owner of the demolished property may, within thirty (30) days
33 after the date of demolition, redeem the stored property upon the payment of a
34 reasonable storage fee to the demolition contractor. If the record owner of the
35 demolished building or structure fails to redeem the stored property, it shall become
36 the property of the demolition contractor who shall have no recourse against the
37 record owner of the demolished building or structure or the Municipality for any
38 storage charges.

39
40 **23.70.708.5 Repair, demolition or removal by code official.** When any work,
41 repair or demolition is to be done pursuant to section 708.3, the code official shall
42 cause the required work to be accomplished by personnel of this jurisdiction or by
43 private contract. All necessary permits shall be obtained prior to any work. If any
44 part of the work is to be accomplished by private contract, standard Municipality of
45 Anchorage contractual procedures shall be followed.
46

23.70.708.6 Interference with repair, demolition or removal work prohibited.

No person shall obstruct, impede or interfere with the code official engaged in the work of repairing, demolishing or removing any such building or structure, pursuant to the provisions of this chapter, or in performing any necessary act preliminary to or incidental to such work or authorized or directed pursuant to this chapter.

Section 23.70.709 Emergency abatement by code official.

23.70.709.1 Summary abatement. The code official, with written approval of the city manager, may abate any public nuisance without notice in an emergency where the lives or safety of the public is endangered and where immediate action is necessary and timely notice cannot be given. All other abatement proceedings, except the necessity and the manner and method of giving notice shall apply to the nuisance summarily abated, including the recovery of the costs of the summary abatement.

Section 23.70.710 Recovery of costs by code official.

23.70.710.1 Responsibility for payment. The responsibility for payment of the charges for all expenses incurred during abatement by code official as set forth in this chapter shall rest solely upon the owners of the property upon which the abatement occurred. Owners, as used in this section, includes the record owner upon the date of service of notice and order as served under section 704, jointly and severally with any subsequent owner until all costs assessed under this chapter are paid in full.

23.70.710.2 Enforcement. The Municipality shall have the right to bring suit for the collection of charges for abatement as set forth in this chapter plus costs and attorney's fees against any or all of the parties responsible for payment.

23.70.710.3 Account of expense.

- A. The code official shall cause to be kept an account of the cost, including incidental expenses, incurred by the Municipality in the repair, demolition or removal of any building or structure done pursuant to the provisions of this chapter. Upon the completion of the work for repair, demolition or removal of the building or structure, the code official shall forward one or more bills for collection to the record owner as identified in this chapter, specifying the nature and costs of the work performed. Such costs shall be considered charges against the property and may be collected pursuant to this chapter or through any other legal means.
- B. The term "incidental expenses" shall include, but not be limited to, the actual expenses and costs of the Municipality in the preparation of notices, specifications and contracts, overhead for account work, work inspection, and the cost of printing and mailing notices required hereunder.
- C. If the bill for collection remains unpaid thirty (30) days after mailing of notice to the record owner(s), the Municipality shall be entitled to late fees on the amount billed from the date of mailing until paid at the rate

prescribed by law for delinquent real property taxes. Any payments made or received shall be first applied to accumulated late fees.

23.70.710.4 Lien procedure. Charges for the repair, demolition or removal of any building or structure done pursuant to the provisions of this chapter become a lien upon the real property upon which the building or structure is or was located. The code official shall record a claim of lien at the Anchorage District Recorder's Office. The Lien placed shall meet all Alaska Statutes and municipal codes.

23.70.710.5 Bill to collections. When charges for the repair, demolition or removal of any building or structure remain unpaid after thirty (30) days from the date the code official forwards an invoice for payment to the record owner as identified in this chapter, the code official shall forward the bill to collections as per MOA policies and procedures.

23.70.710.6 Collection of abatement charges. The lien created herein may be enforced as provided in Alaska Statute. The enforcement of the lien is a cumulative remedy and does not bar the collection of the charges for abatement as provided in section 709.

CHAPTER 23.75 LOCAL AMENDMENTS TO THE AMERICAN NATIONAL STANDARDS INSTITUTE/AMERICAN SOCIETY OF MECHANICAL ENGINEERS ANSI/ASME A17.1-SAFETY CODE FOR ELEVATORS AND ESCALATORS, 2004 Edition

Sections

23.75.1.1.4	Effective date
23.75.2.12.6.2.6	Access to hoistway on existing elevators
23.75.3.12.3	
23.75.2.26.1.4.2.1	Top-of-car inspection of existing elevators
23.75.3.26.2.1	
23.75.8.6.1.1.4	Implementation of mandatory maintenance program
23.75.8.11.1.3	Periodic inspection and test frequency
23.75.8.11.1.3.1	Residential elevator inspections
23.75.8.11.1.3.2	Reporting injuries involving elevators and escalators
23.75.8.7.1.1(c)	Applicability of alteration requirements
23.75.1.1.1.2	Addenda to ASME A17.1 2004
23.75.2.2.4.2	Access to pits

23.75.1.1.4 Effective date.
The effective date for the standard shall be July 1, 2005.

23.75.2.12.6.2.6 Access to hoistway on existing elevators.

23.75.3.12.3

Add the following:

All existing elevators shall have mechanical (lunar key) means to access hoistway at the top and bottom landing. Elevators with walk in pit access may exclude this access at the bottom landing.

Hoistway door unlocking devices shall conform to the following:

1. The device shall unlock and permit the opening of the hoistway door from the access landing irrespective of the position of the car.
2. The device shall be installed at the access landings, and may be provided at other landings for emergency purposes.
3. The device shall be designed to prevent unlocking the door with common tools.
4. The operating means for unlocking the door shall be available to and used only by inspectors, elevator maintenance and repair personnel, and qualified emergency personnel.
5. The unlocking-device keyway shall be located at a height not greater than 6 feet 11 inches (2.11m) above the floor.

23.75.2.26.1.4.2.1 Top-of-car inspection of existing elevators.**23.75.3.26.2.1**

Add the following:

1. Elevators with automatic or continuous-pressure operation shall have a continuous-pressure button operating switch mounted on the top of the car for the purpose of operating the car solely from the top of the car. The device shall operate the car at a speed not exceeding 150 fpm (0.76 m/s) and comply with all provisions of 23.75.2.26.1.4.
2. The means for transferring the control of the elevator to the top-of-car operating device shall be on the car top and located between the car cross-head and the side of the car nearest the hoistway entrance normally used for access to the car top.

23.75.8.6.1.1.4 Implementation of mandatory maintenance program.

Add the following:

The enforcement of section 8.6 (Maintenance Repair and Replacement) shall not begin until January 1, 2006 or for a period of six (6) months after the adoption of the ANSI A17.1 2004 code by the Municipality of Anchorage, whichever is later.

23.75.8.11.1.3 Periodic inspection and test frequency.

Add the following:

The inspection and test period for all units covered by the 2004 A17.1 shall be as noted in Appendix N, Table N-1 except where periodic inspection intervals were six (6) months change to twelve (12) months.

23.75.8.11.1.3.1 Residential elevator inspections.

Add the following:

Annual certificates of inspection shall not be required for conveyances within a dwelling unit.

23.75.8.11.1.3.2 Reporting injuries involving elevators and escalators.

Add the following:

Reporting Requirements: An owner or operator shall report, in detail and within forty-eight (48) hours, any accident involving an elevator or escalator which results in injury to a person. If the deadline for the report falls on a weekend or holiday, the report shall be made at the beginning of the next municipal working day. The report shall be in the form of a written narrative to the Municipality of Anchorage Building Official, Development Services, Works, Division of Building Safety. The report shall be signed by the author.

Unsafe Conditions: When an inspection reveals an unsafe condition, the inspector shall immediately file with the owner and the building official a full and true report of such unsafe condition. If the building official finds the unsafe condition endangers human life, the building official shall cause to be placed on such elevator, escalator, or moving walk, in a conspicuous place, a notice stating such conveyance is unsafe and may order the operation and use of the conveyance to cease until all necessary repairs are made and the conveyance is reinspected and released to return to operation. The owner shall see to it such notice of unsafe conditions is legibly maintained where placed by the building official. The building official shall also issue an order in writing to the owner requiring the repairs or alterations to be made to such conveyance as necessary to render it safe and may order the operation thereof discontinued until the repairs or alterations are made or the unsafe conditions are removed. A posted notice of unsafe conditions shall be removed only by the building official when satisfied the unsafe conditions have been corrected.

23.75.8.7.1.1(c) Applicability of alteration requirements.

Delete, if adopted by the authority having jurisdiction.

23.75.1.1.1.2 Addenda to ASME A17.1 2004.

Add the following:

All addenda to the ASME A 17.1 2004 shall be adopted on the date recommended by ASME and approved by the Municipality of Anchorage Building Official.

23.75.2.2.4.2 Access to pits.

Change lines:

A clear distance of not less than 180 mm (7in.) from the centerline of the rungs, cleats, or steps to the nearest permanent object in back of the ladder shall be provided. Change 180 mm to 115 mm (4.5in.).

Delete the following:

When unavoidable obstructions are encountered, the distance shall be permitted to be reduced to 115 mm (4.5in.).

**CHAPTER 23.76 LOCAL AMENDMENTS TO THE AMERICAN NATIONAL
STANDARDS INSTITUTE/AMERICAN SOCIETY OF
MECHANICAL ENGINEERS ANSI/ASME A18.1-2003
SAFETY STANDARD FOR PLATFORM LIFTS AND
STAIRWAY CHAIRLIFTS.**

Sections:

Section 1.1.4	Effective date
Section 10.2.1	Inspection and test periods

Proposed code amendments to the ASME A18.1-2003.

Add line:

Section 1.1.4	Effective date.
----------------------	------------------------

The effective date of this standard shall be July 1, 2005.

Change line:

Section 10.2.1	Inspection and test periods.
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Change six (6) months to twelve (12) months in the first sentence.

**CHAPTER 23.85 LOCAL AMENDMENTS TO THE INTERNATIONAL
RESIDENTIAL CODE 2006 EDITION.**

Sections:

23.85.R100	Local amendments to the 2006 International Residential Code
23.85.R100.1	Administrative
23.85.R301.2.1	Wind limitations
23.85.Table R301.2(1)	Climatic and Geographic Design Criteria
23.85.Figure R301.2(4)	Basic wind speeds for 50-year mean recurrence interval
23.85.R301.2.1.1	Design criteria
23.85.R301.2.2.1.1	Alternate determination of seismic design category
23.85.Table R302.1	Exterior walls
23.85.R308.6.9	Testing and labeling
23.85.R309.1	Opening protection

1	23.85.R309.2	Separation required
2	23.85.R310.1	Emergency escape and rescue required
3	23.85.R316.2	Loose-fill insulation
4	23.85.R317.1	Two-family dwellings
5	23.85.R317.2.1	Continuity
6	23.85.R317.2.1.1	Horizontal continuity
7	23.85.R317.2.1.1.1	Exterior walls
8	23.85.R317.2.1.1.2	Horizontal projecting elements
9	23.85.R317.2.4	Structural independence
10	23.85.R317.4	Common wall insulation
11	23.85.R318.1	Moisture control
12	23.85.R319.1	Location required
13	23.85.R319.1.1	Field treatment
14	23.85.R319.3	Fasteners
15	23.85.R325	Carbon monoxide detectors
16	23.85.R325.1	Interconnection
17	23.85.R325.2	Power source
18	23.85.R401.1	Application
19	23.85.R401.3	Drainage
20	23.85.R401.4	Soil tests
21	23.85.Table R401.4	Hazard zone
22	23.85.R403.1	General
23	23.85.Table R403-16	Reinforced concrete
24	23.85.Figure R403-25	Typical foundation and footing details
25	23.85.Figure R403-29	Typical step footing
26	23.85.Figure R403-31	Typical pony wall for split level
27	23.85.Figure R403-34	All weather wood foundation
28	23.85.Figure R403-37	Typical basement foundation wall
29	23.85.Table R403.1	Footing depths
30	23.85.R403.1.1	Minimum size
31	23.85.R403.1.3	Seismic reinforcing
32	23.85.R403.1.4.1	Frost protection
33	23.85.R403.2	Footings for wood foundations
34	23.85.R404.1.1	Masonry foundation walls
35	23.85.R404.2	Wood foundation walls
36	23.85.R404.3	Wood sill plates
37	23.85.R404.4	Insulating concrete form foundation walls
38	23.85.R404.4.1	Applicability limits
39	23.85.R406.1	Concrete and masonry foundation dampproofing
40	23.85.R406.2	Concrete and masonry foundation waterproofing
41	23.85.R406.3	Dampproofing for wood foundations
42	23.85.R406.3.2	Below grade moisture barrier
43	23.85.R407.2	Steel column protection
44	23.85.R602.3.2	Top plate
45	23.85.R602.6	Drilling and notching – studs
46	23.85.R703.2	Water-resistive barrier

1	23.85.R703.3.1	Panel siding
2	23.85.R703.8	Flashing
3	23.85.Table R703.4	Water-resistant siding attachment and minimum
4		thickness
5	23.85.R802.2	Design and construction
6	23.85.R802.10.1	Truss design drawings
7	23.85.R802.10.2	Design
8	23.85.R802.10.3	Bracing
9	23.85.R806.1	Ventilation required
10	23.85.R806.2	Minimum area
11	23.85.R806.4	Conditioned attic assemblies
12	23.85.R807.1	Attic access
13	23.85.R903.1	General
14	23.85.R903.4	Roof drainage
15	23.85.R905.2.1	Sheathing requirements
16	23.85.R905.2.2	Slope
17	23.85.R905.2.7	Underlayment application
18	23.85.R905.2.7.1	Ice barrier
19	23.85.R905.2.8	Flashing
20	23.85.R905.2.8.2	Valleys
21	23.85.R905.2.8.3	Crickets and saddles
22	23.85.R905.3	Clay and concrete tile
23	23.85.R905.4	Metal roof shingles
24	23.85.R905.5	Mineral-surfaced roll roofing
25	23.85.R905.6	Slate and slate-type shingles
26	23.85.R905.7	Wood shingles
27	23.85.R905.8	Wood shakes
28	23.85.R905.9.1	Slope
29	23.85.R905.10	Metal roof panels
30	23.85.R905.14	Sprayed polyurethane foam roofing
31	23.85.Chapter 11	Energy efficiency
32	23.85.Table R11	Minimum Insulation R-Value [(hrft2degF)/Btu]
33	23.85.	Chapters 12-42
34	23.85.	Appendix
35	23.85.AE101.1	General
36	23.85.AE102.7	Mobile homes, campers, and travel trailers
37	23.85.AE102.7.1	Mobile homes
38	23.85.AE102.7.2	Campers and travel trailers
39	23.85.AE201	Definitions
40	23.85.AE301.1	Initial installation
41	23.85.AE301.5	Gas and plumbing service
42	23.85.AE302.4	Who may apply
43	23.85.AE307	Utility service
44	23.85.AE502.3	Footings and foundations
45	23.85.AE502.6	Under-floor clearances-ventilation and access
46	23.85.AE503.1	Skirting and permanent perimeter enclosures

23.85.AE604.1 Ground anchors**23.85.R100 Local amendments to the 2006 International Residential Code.**

The amendments to the 2006 International Residential Code are listed hereafter by section. The last digits of the number (after the title and chapter digits) are the section of the 2006 International Residential Code to which the amendments refers, i.e., 23.85.R310 refers to amendments to Section R310 of the 2006 International Residential Code.

23.85.R100.1 Administrative.

Delete Sections R103 through R114. See Anchorage Administrative Code Chapter 23.10 for Administrative Provisions, Fees, and Special Inspections.

23.85.R301.2.1 Wind limitations.

Delete the words "EXTERIOR DOORS" from the third sentence.

23.85.Table R301.2(1) Climatic and Geographic Design Criteria.

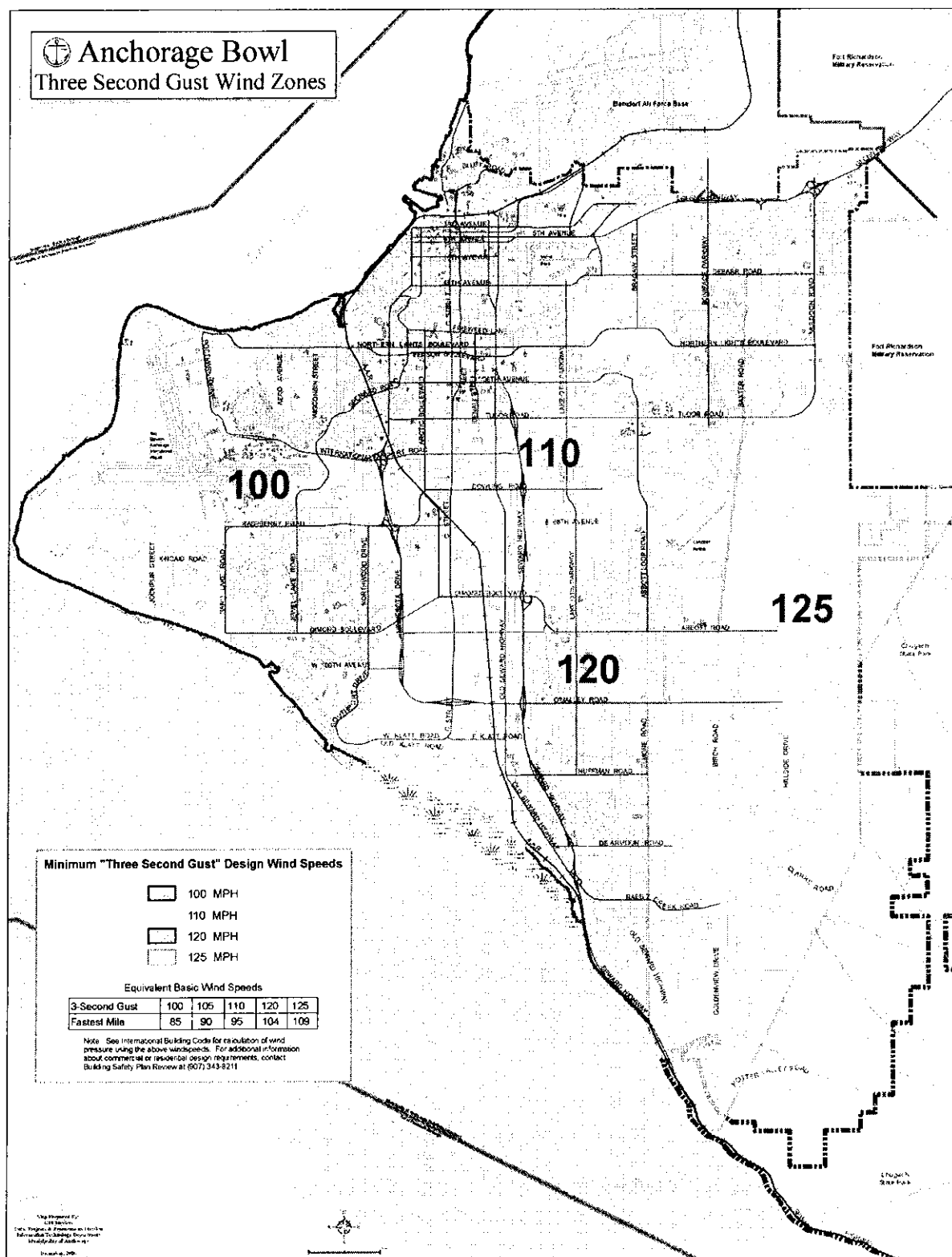
Add the following information in the table:

Ground snow load	50 PSF
Equates to 40 psf roof snow load	
Wind Speed	23.85.Figure R301.2(4)
Seismic Design Category	D ₂
Subject to damage from:	
Weathering	Yes, severe
Frost Line Depth	42" for warm foundation, 60" for cold foundation
Termite	No
Winter Design Temperature	-25 deg F
Ice Shield Underlayment Required	Yes
Flood Hazards	Yes, see flood hazard maps
Air Freezing Index	3500
Mean Annual Temperature	35°F

23.85.Figure R301.2(4) Basic wind speeds for 50-year mean recurrence interval.

Amend by deleting Figure R301.2(4) and replace with the following:

Anchorage Bowl "Three Second Gust" Wind Zone Map:



23.85.R301.2.1.1 Design criteria.

Add to Section R301.2.1.1

Exception: Outbuilding 400 square feet or less.

23.85.R301.2.2.1.1 Alternate determination of seismic design category.

Delete paragraphs R301.2.2.1.1, R301.2.2.1.2, and table R301.2.2.1.1 and replace with the following:

The seismic design category for Anchorage shall be D₂.

23.85.Table R302.1 Exterior walls.

In the row "Projections" of the table, under the column "Minimum Fire Separation Distance", delete the 4 feet and replace with 0 to less than 3 feet. Delete 5 feet and replace with greater than or equal to 3 feet.

23.85.R308.6.9 Testing and labeling.

Add sentence to end of paragraph:

Will accept literature provided on site to show skylights meet criteria of section, in lieu of label adhered to skylight.

23.85.R309.1 Opening protection.

Add to the end of the paragraph:

Access to the crawlspace from garage, shall have the same door as mentioned above. All doors shall be self-closing and have smoke gaskets at top and sides of doors and adjustable threshold or sweep. Access from garage to crawlspace shall be in a wall and not through a floor.

23.85.R309.2 Separation required.

Amend section by replacing ½ inch gypsum board with ⅝ inch Type X gypsum board in all locations within section.

23.85.R310.1 Emergency escape and rescue required.

Number exception in the IRC code 1; add exception number 2:

2. Where windows are provided as a means of escape or rescue in a basement, they shall have a finished sill height of not more than forty-eight (48) inches above the finished floor.

23.85.R316.2 Loose-fill insulation.

Add the following paragraph after exception:

Depth gages or truss markings shall be provided for blown-in insulation to allow for verification of depth throughout the attic space.

23.85.R317.1 Two-family dwellings.

Delete exception 2, and add the following exception in its place:

2. A one-hour fire-resistive separation shall not be required between an Accessory Dwelling Unit (ADU), as defined under MOA Title 21 – section 21.45.035, and its primary residence.

23.85.R317.2.1 Continuity.

Delete the last sentence in paragraph.

23.85.R317.2.1.1 Horizontal continuity.

Add the following subsection:

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.

23.85.R317.2.1.1.1 Exterior walls.

Add the following subsection:

Where the fire resistance rated wall or walls separating dwelling units intersects the exterior walls, the exterior walls shall have a one-hour fire resistance rating with $\frac{3}{4}$ hour opening protection. The protection shall extend a minimum of 4 feet beyond each side of the intersection with the dwelling unit separation wall. Where the exterior walls on each side of the dwelling separation wall form an angle equal to or greater than 180 degrees, exterior wall protection is not required.

23.85.R317.2.1.1.2 Horizontal projecting elements.

Add the following subsection:

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.

23.85.R317.2.4 Structural independence.

Add to the end of the sentence in exception #5:

“and of which will not be a bearing wall (walls) supporting any floor or roof”

23.85.R317.4 Common wall insulation.

Add new section:

The portion of the common wall(s) between dwelling units located in the attic space shall be fireblocked at ceiling line(s) and insulated equivalent to the attic space directly above the fireblocking.

23.85.R318.1 Moisture control.

Delete paragraph and exceptions and add the following:

All exterior wall, ceiling, roof and floor assemblies which enclose heated spaces and which are exposed to outdoor ambient temperatures shall be protected against water vapor transmission. Assemblies not otherwise of impermeable construction shall have installed, on the heated side of the insulation or air spaces, vapor retarders having a perm rating of 0.06 minimum (equivalent to 6 mils polyethylene sheeting) or other material approved by the Building Official.

23.85.R319.1 Location required.

Amend first sentence by deleting the words “naturally durable wood or”.

23.85.R319.1.1 Field treatment.

Add the following sentence to the end of the paragraph:

This requirement only applies to exposed glue-laminated timbers in section R319.1.5.

23.85.R319.3 Fasteners.

Delete exception 1.

23.85.R325 Carbon monoxide detectors.

Add new section:

At least one carbon monoxide detector shall be installed on each floor level. If a floor level contains bedrooms, at least one detector shall be located in the immediate vicinity but outside of the bedrooms. Carbon monoxide detectors shall be listed and installed in accordance with their listing. Combination carbon monoxide/smoke detectors are acceptable as long as they meet all requirements.

Exceptions:

1. Carbon monoxide detectors are not required in dwelling units that have no combustion appliances and that do not have an attached garage.
2. Carbon monoxide detectors are not required in dwelling units that have only direct vent combustion appliances and that do not have an attached garage.
- 3.

23.85.R325.1 Interconnection.

Add new subsection:

In new construction, carbon monoxide detectors shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual dwelling unit.

23.85.R325.2 Power source.

Add new subsection

In new construction, carbon monoxide detectors shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery back-up. Wiring shall be permanent and without disconnecting switch other than those required for overcurrent protection. In existing construction, carbon monoxide detectors shall be permitted to be battery powered or cord-and-plug type with battery back-up.

23.85.R401.1 Application.

Add the following item No. 3 to the exception:

3. Wood foundations 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 to prevent impacts to neighboring properties.

23.85.R401.4 Soil tests.

Add the following:

Special site investigations shall be performed in potentially hazardous areas as follows:

1. Special site investigations are required in delineated seismic hazard zones after consideration of the proposed location, use, and building type. The required level of documentation is specified in the following paragraphs according to designations in 23.85.Table R401.4.
 - a. For site investigation requirement "A", submit geotechnical information sufficient for the Building Official to verify that the assumed hazard zonation is consistent with known site conditions.
 - b. For site investigation requirement "B", provide all information described above; plus submit geotechnical investigation per 2006 IBC 1802 prepared by a professional engineer registered in the State of Alaska. It may be necessary to extend the investigation beyond the immediate site boundaries in order to evaluate applicable hazards. The structure shall be designed and sealed by a structural engineer registered in the State of Alaska.

2. Where the soil investigation section of the Anchorage Administrative Code requires a geotechnical investigation to be performed, the potential for isolated permafrost shall be addressed in the geotechnical report.

23.85.Table R401.4 Hazard zone.

OCCUPANCY	SITE INVESTIGATION REQUIREMENT HAZARD ZONE (SEE NOTES)				
	5	4	3	2	1
Residential	B	B	A	A	A

NOTES: For details and descriptions of site investigation requirements, see IBC Chapter 18.

Hazard Zones*

1. Lowest Ground Failures Susceptibility
2. Moderately Low Ground Failure Susceptibility
3. Moderate Ground Failure Susceptibility
4. High Ground Failure Susceptibility
5. Very High Ground Failure Susceptibility

*Reference: Municipality of Anchorage, Geotechnical Hazard Assessment Study, date 1979.

23.85.R403.1 General.

Delete the last sentence of R403.1 and figures R403.1(1), R403.1(2), and R403.1(3) and Table R403.1, and add or replace with the following:

1. Definitions
 - a. Warm Foundations: Any foundation where the temperature of the bearing soils are normally maintained above freezing;
 - b. Cold Foundation: Any foundation where the temperature of the bearing soils are 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 designed under the provisions of the IBC. Footings and foundations shall be constructed of masonry, concrete, or treated wood. Footings of concrete and masonry shall be of solid material. Foundations supporting wood shall extend at least six (6) inches above the adjacent grade. Unless other recommendations are provided by a foundation investigation report, footings shall meet the following requirements:
 - 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.

23.85.Table R403-16 Reinforced concrete.

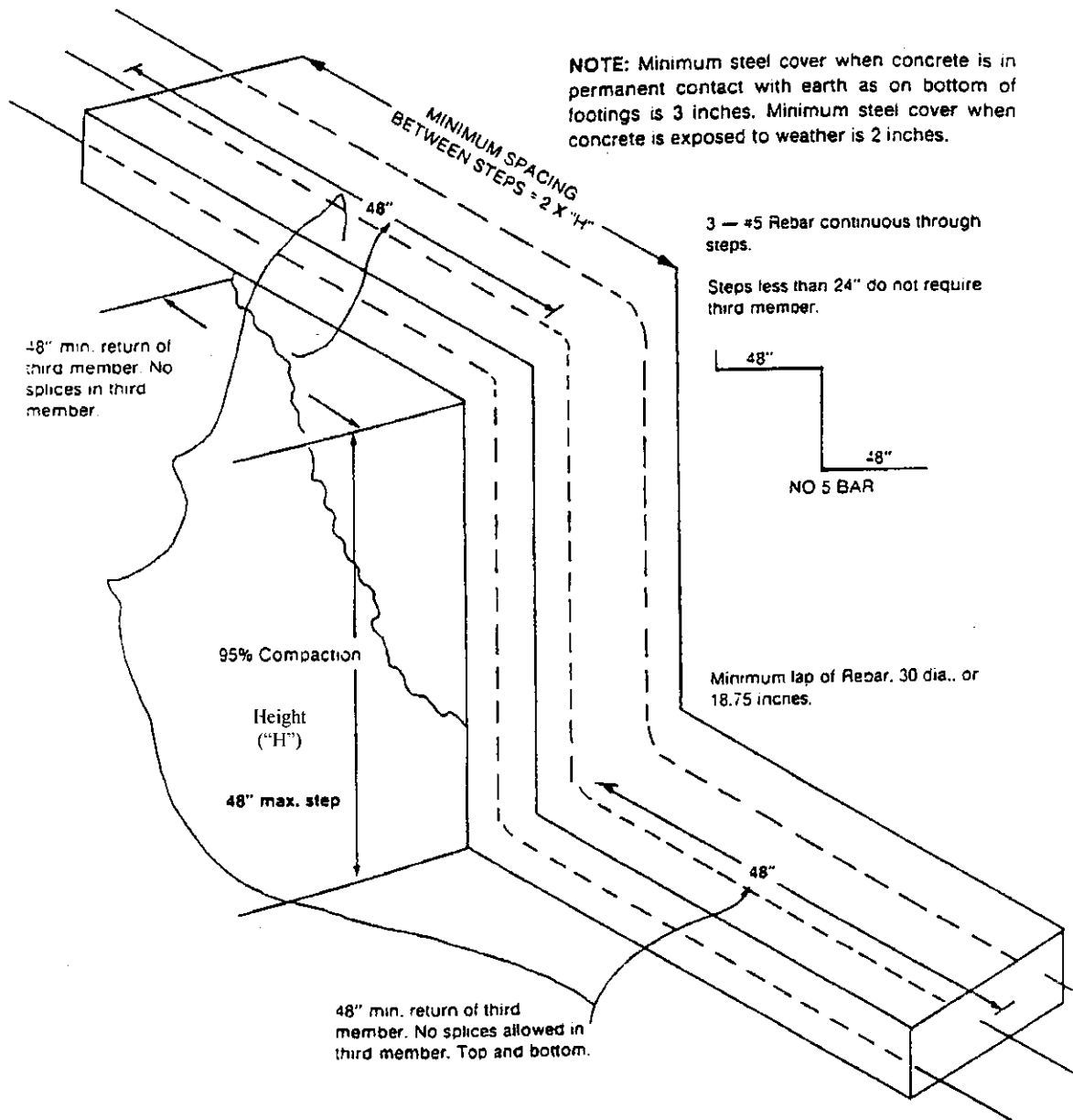
1. Reinforced concrete walls shall be anchored to all floors and roofs in accordance with section 1604.8.2 of the International Building Code.
2. All intersecting reinforced concrete walls shall be tied together. (IBC 1907.13)
3. All interior and exterior concrete walls shall be reinforced. (ACI-05 14.3.1)
4. All structural members framing into or supported on concrete walls or columns shall be anchored. (ASCE 7-05 1211)
5. All deformed reinforcing bars shall meet or exceed ASTM A615 requirements. (ACI-05 3.5.3)
6. Concrete in seismic zone D shall have a minimum compressive strength of 3000 psi for severe exposure. (See IBC 1805.9 and table 1904.2.2)
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.

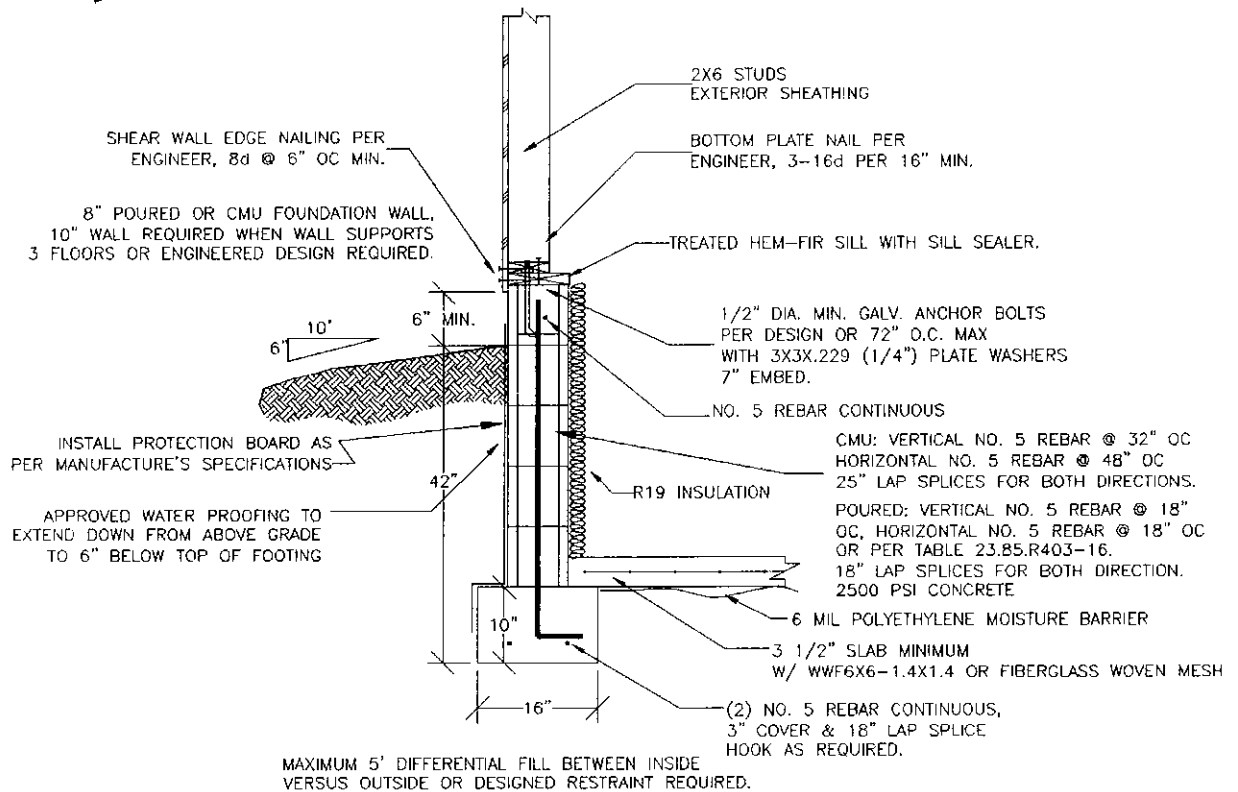
MINIMUM REINFORCEMENT FOR CONCRETE WALLS (Horizontal and Vertical Spacing)

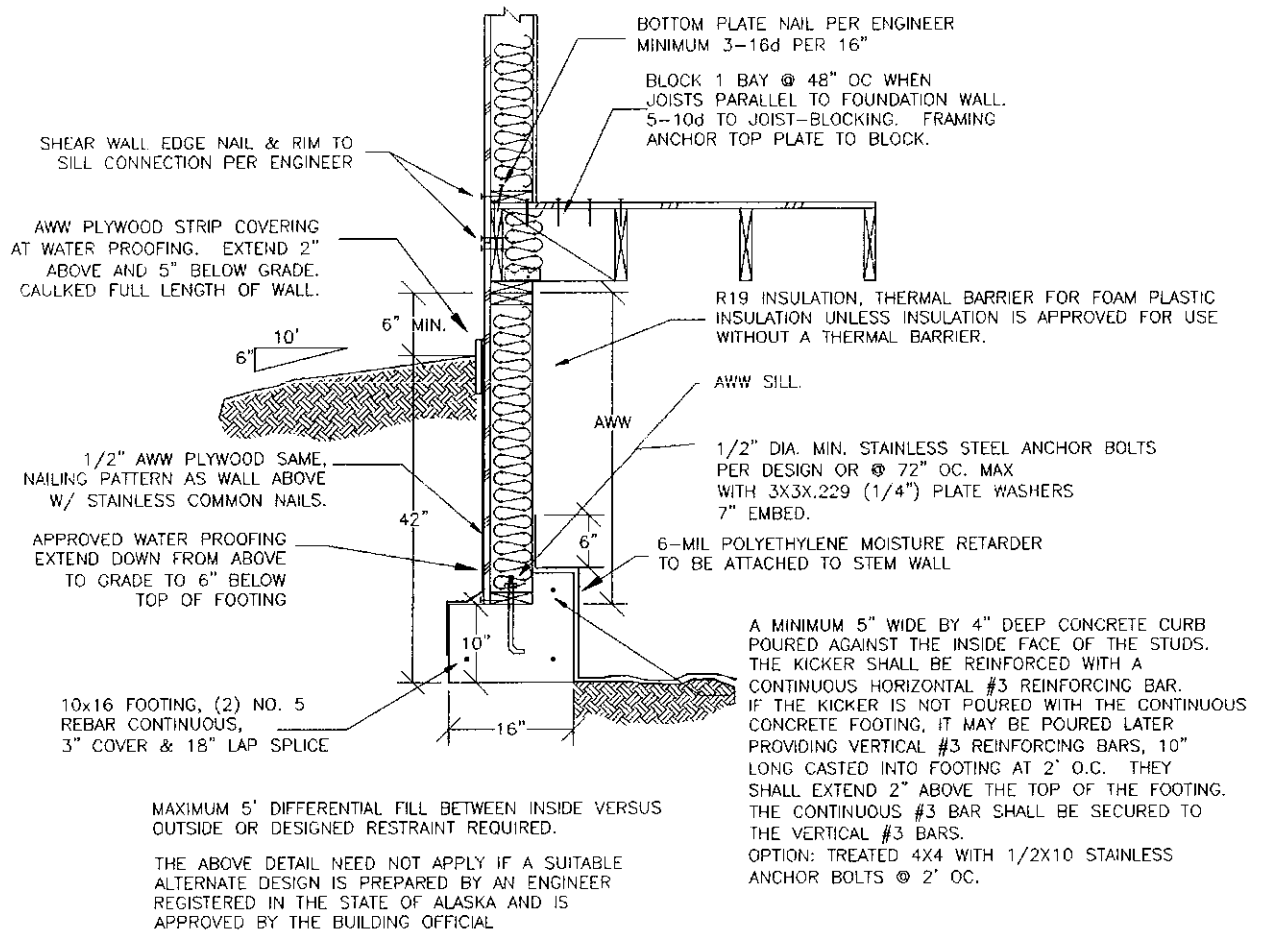
Width of Wall	#5 Bar	#4 Bar
6" Walls	#5 @ 18" O.C. hor. #5 @ 18" O.C. vert.	#4 @ 16" O.C. hor. #4 @ 18" O.C. vert.
8" Walls	#5 @ 18" O.C. hor. #5 @ 18" O.C. vert.	#4 @ 12" O.C. hor. #4 @ 18" O.C. vert.
10" Walls	#5 @ 15" O.C. hor. #5 @ 18" O.C. vert.	#4 @ 10" O.C. hor. #4 @ 16" O.C. vert.

1	4
2	5
3	6
	7
	8
	9
	0
	1
	2
	3
	4
	5
	6
	7
	8
	9
	0
	1
	2
	3
	4
	5

1 **23.85.Figure R403-29 Typical step footing.**
2

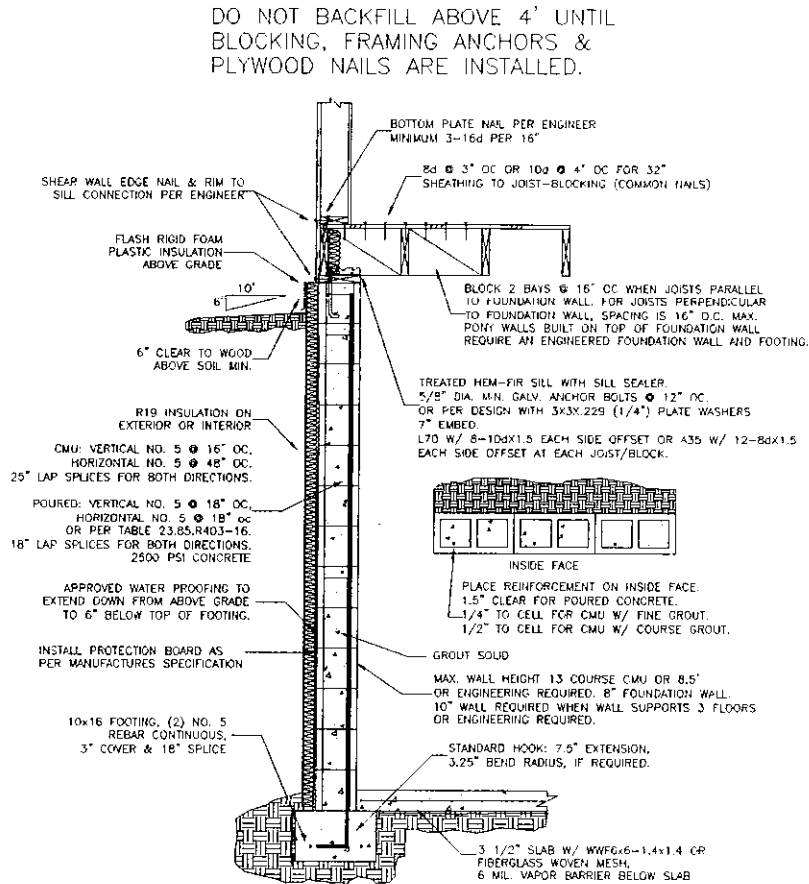


23.85.Figure R403-31 Typical pony wall for split level.

23.85.Figure R403-34 All weather wood foundation.

23.85.Figure R403-37

Typical basement foundation wall.



23.85.Table R403.1 Footing depths.

Foundation Type	Minimum Footing Depth (Inches)	
	Warm Foundation	Cold Foundation (3)(4)
Perimeter Footing (1)	42	60
Interior or Interior Isolated Spread Footings (2)	all measurements are from top of finished grade	
Cast-in-Place Concrete Pier	42	120 (5)

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. Exterior decks, landings, and platforms not rigidly attached to the building and not greater than 30 inches above grade may bear directly on the ground. Bearing materials must meet other portions of this code.
4. The minimum footing depths may not be adequate for frost susceptible soils. Cold footings shall be founded below the frost line, or be protected from freezing with insulation or other appropriate means. In addition, provisions shall be made to resist uplift forces due to frost jacking on the side of cold foundations.
5. Cast-in-place concrete piers installed in non-frost-susceptible material may be 60 inches (five feet).

23.85.R403.1.1 Minimum size.

Delete section – see 23.85.R403.1

23.85.R403.1.3 Seismic reinforcing.

Delete exception.

23.85.R403.1.4.1 Frost protection.

Change method #1 to reference 23.85.Table R403.1, not R301.2(1)

23.85.R403.2 Footings for wood foundations.

Delete entire paragraph and replace with the following:

Wood foundations shall be per 23.85.Figure R403-34.

23.85.R404.1.1 Masonry foundation walls.

Delete Sections R404.1.1 through R404.1.8.

Delete Tables R404.1.1(1), R404.1.1(2), R404.1.1(3), R404.1.1(4), and Figure R404.1.5(1).

See 23.85.R403.1.

23.85.R404.2 Wood foundation walls.

Delete subsection in its entirety; reference 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 x by 6-inch and shall be bolted to the foundation or foundation wall with not less than ten (10) inch by one half (1/2) inch nominal diameter galvanized steel bolts embedded at least seven (7) inches into the concrete or in fully grouted cells of reinforced masonry and spaced not more than six (6) feet zero (0) inches 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 treated material specified in Section R319.1.

23.85.R404.4 Insulating concrete form foundation walls.

Delete subsections R404.4.2-R404.4.6.

23.85.R404.4.1 Applicability limits.

Delete sentences 4 and 5, and replace with, "In seismic design categories D0, D1, and D2, foundation walls shall comply with Section 23.85.R403.1. Only flat insulating concrete form wall systems shall be used with reinforcement per 23.85.Table R403-16."

23.85.R406.1 Concrete and masonry foundation dampproofing.

Substitute with the following:

In the first sentence beginning with the word "enclosed", 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" below the top of the footing.'

Number the exception in the IRC code to 1 and add exception 2:

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.

Delete the first sentence and replace with the following:

Exterior foundation walls that retain earth, crawl space walls more than 40 inches in height, and enclosed interior spaces and floors below grade shall be waterproofed from above grade to 6” below the top of the footing.

Number the exception in the IRC code to 1 and add exception 2:

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.

Delete the word “dampproofing” in heading and body of section and replace with “waterproofing”.

23.85.R406.3.2 Below grade moisture barrier.

Delete R406.3.2 and replace with the following:

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 (2) inches above and five (5) 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 6” below the top of the footing.

23.85.R407.2 Steel column protection.

Delete this section in its entirety.

23.85.R602.3.2 Top plate.

Delete exception.

23.85.R602.6 Drilling and notching – studs.

Amend section 602.6 by adding item 3:

3. All studs in walls containing plumbing drains and vents shall be a minimum of 6” nominal width or structurally sheath one side when 4” nominal width studs are used.

23.85.R703.2 Water-resistive barrier.

Amend the first sentence of section by starting the sentence out with: "Though, not required by the Municipality of Anchorage, when installed or when required by the manufacturer, apply..."

Amend the first sentence by adding the word "permeable" between the "of" and "No. 15".

23.85.R703.3.1 Panel siding.

Add the following:

Exterior type plywood siding with a grooved pattern shall not be installed horizontally and used as the weather resistant siding.

23.85.R703.8 Flashing.

Amend section by deleting items 1 and 4.

23.85.Table R703.4 Water-resistant siding attachment and minimum thickness.

In the fourth column "Water resistive barrier required", add note after heading to see local amendment 23.85.R703.2.

23.85.R802.2 Design and construction.

Add a sentence to end of paragraph as follows:

Minimum depth from roof sheathing to wall plate at exterior side of exterior wall shall be 11 ¼ inches.

23.85.R802.10.1 Truss design drawings.

Amend first sentence by deleting the words: "and approved prior to installation."

23.85.R802.10.2 Design.

Add the following sentence to end of paragraph:

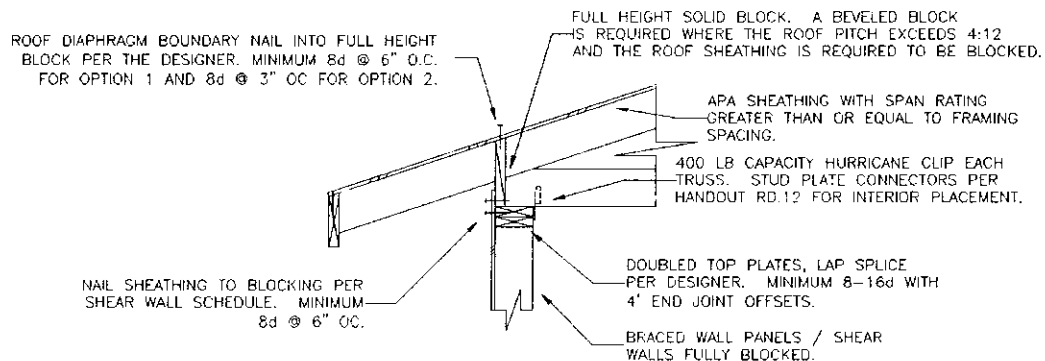
Minimum depth of truss at exterior wall plate shall be 11 ¼ inches at exterior side plate.

23.85.R802.10.3 Bracing.

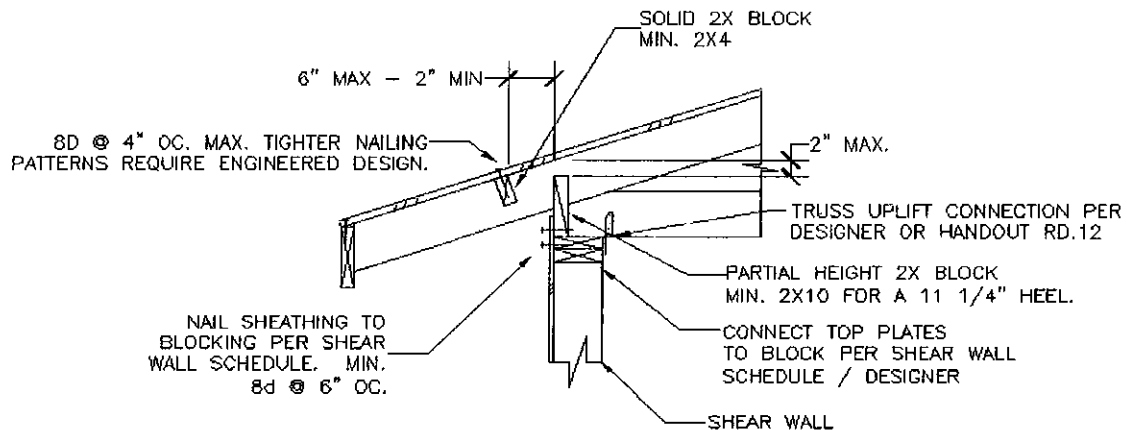
Add the following details and verbiage to section:

OPTION 1: FULL HEIGHT BLOCK IN EVERY SPACE WITH 3 OR MORE 2" DIAMETER OR LARGER HOLES AT TOP OF BLOCK.

OPTION 2: ALTERNATE FULL HEIGHT BLOCK WITH 3 OR MORE 2" DIAMETER HOLES AT TOP OF BLOCK AND PARTIAL HEIGHT BLOCK EVERY OTHER SPACE WITH AN AIR GAP BETWEEN 1"—2" FROM ROOF SHEATHING TO TOP OF PARTIAL HEIGHT BLOCK — MIN. 2X10 BLOCK.



OPTION 3: THIS CONFIGURATION MAY BE USED IN LIEU OF FULL HEIGHT BLOCKS ABOVE EXTERIOR WALLS FOR TRUSSES WITH HEELS OF 11 1/4".



23.85.R806.1 Ventilation required.

Add the following sentence to end of paragraph:

A non-ventilated roof system may be allowed as an alternate method when its design is approved by the Building Official.

23.85.R806.2 Minimum area.

Revise the first sentence of Section R806.2 by replacing the phrase, "except that reduction of the total area to 1 to 300, is permitted, provided that", with the word "and". Delete the last sentence of R806.2.

23.85.R806.4 Conditioned attic assemblies.

Delete section.

23.85.R807.1 Attic access.

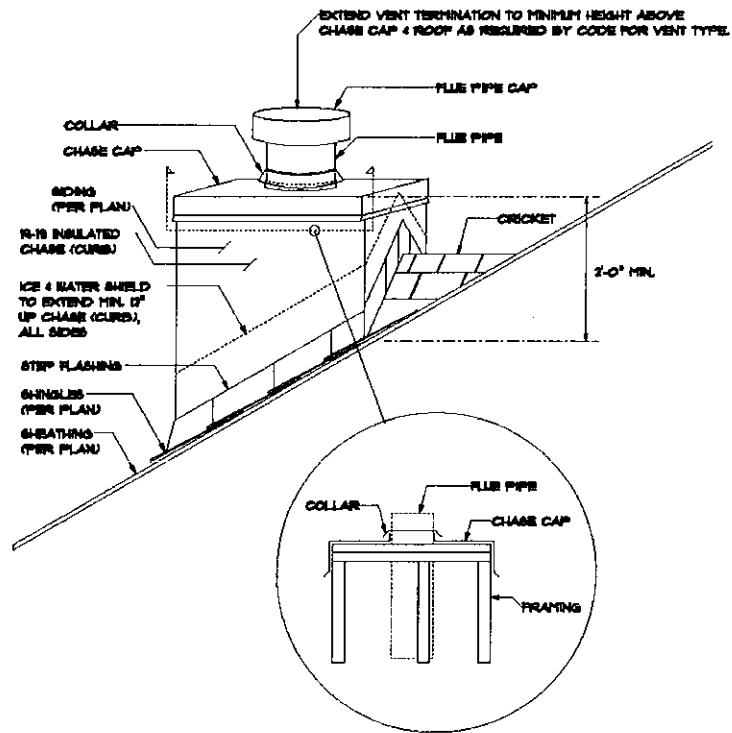
Add the following to Section R807.1:

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

23.85.R903.1 General.

Add the following paragraph to the end of section:

1. All valleys shall have a modified bitumen ice barrier lapped eighteen inches minimum each side of valley centerline. No penetrations shall be located in required valley ice barrier.
2. 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, 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 a 24 inches, wood framed, R-19 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.R903.4 Roof drainage.

Add the following sentence:

Roofs and gutter downspouts shall not create a water flow that damages neighboring properties.

23.85.R905.2.1 Sheathing requirements.

Delete words, "Asphalt shingles" and replace with "The roof covering"

23.85.R905.2.2 Slope.

Delete Section R905.2.2 and replace with the following:

The roof covering shall only be used on roof slopes of three units vertical in 12 units horizontal or greater. Underlayment shall be in accordance with Section 23.85.R905.2.7 and ice protection shall be in accordance with 23.85.R905.2.7.1.

23.85.R905.2.7 Underlayment application.

Delete paragraph and replace with the following:

- A. For roof slopes from three (3) vertical units in twelve (12) horizontal units (3:12) up to but not including four (4) vertical units in twelve (12) horizontal units (4:12) underlayment shall be one layer of self-adhering polymer modified bitumen.

- 1 B. For slopes four (4) units vertical in twelve (12) units horizontal (4:12) and
2 greater underlayment shall be one layer of Type 15 felt. Underlayment shall
3 be installed starting with four (4) inch lap over ice barrier. Each subsequent
4 layer shall be lapped two (2) inches horizontally, and four (4) inches
5 vertically to shed water, continuing to the ridge, fastened sufficiently to hold
6 in place. Ice barrier shall be in accordance with 23.85.R905.2.7.1.
7 C. Distortions in the underlayment shall not interfere with the ability of the roof
8 covering to seal.
9

10 **23.85.R905.2.7.1 Ice barrier.**

11
12 Amend section by deleting from the paragraph the words "...of at least two layers of
13 underlayment cemented together or..."

14 Amend by changing the dimension at the end of the paragraph from 24 inches to 36 inches.
15

16 **23.85.R905.2.8 Flashing.**

17
18 Add the following at the end of the paragraph:

19 Flashing shall be no less than 4 inches by 4 inches in width.
20

21 **23.85.R905.2.8.2 Valleys.**

22 Delete items 1, 2, and 3. Refer to 23.85.R903.1, #1.
23

24 **23.85.R905.2.8.3 Crickets and saddles.**

25 Amend first sentence by replacing the dimension 30 inches with 12 inches.
26

27 **23.85.R905.3 Clay and concrete tile.**

28 Delete subsections R905.3.1 through R905.3.3, but not R905.3.3.3. Refer to R905.2.1;
29 23.85.R905.2.2; 23.85.R905.2.7; and 23.85.R905.2.7.1.

23.85.R905.4 Metal roof shingles.

Delete subsections R905.4.1 through 905.4.3, Refer to R905.2.1; 23.85.R905.2.2; 23.85.R905.2.7; and 23.85.R905.2.7.1.

23.85.R905.5 Mineral-surfaced roll roofing.

Delete subsections R905.5.1 through 905.5.3. Refer to R905.2.1; 23.85.R905.2.2; 23.85.R905.2.7; and 23.85.R905.2.7.1.

23.85.R905.6 Slate and slate-type shingles.

Delete subsection R905.6.3. Refer to 23.85.R905.2.7; and 23.85.R905.2.7.1.

23.85.R905.7 Wood shingles.

Delete subsections R905.7.1 through R905.7.3. Refer to R905.2.1; 23.85.R905.2.2; 23.85.R905.2.7; and 23.85.R905.2.7.1.

23.85.R905.8 Wood shakes.

Delete subsections R905.8.1 through R905.8.3. Refer to R905.2.1; 23.85.R905.2.2; 23.85.R905.2.7; and 23.85.R905.2.7.1.

23.85.R905.9.1 Slope.

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.R905.10 Metal roof panels.

Delete subsections R905.10.1 through R905.10.2. Refer to R905.2.1; 23.85.R905.2.2; 23.85.R905.2.7; and 23.85.R905.2.7.1.

23.85.R905.14 Sprayed polyurethane foam roofing.

Delete paragraph and all subsections.

23.85.Chapter 11 Energy efficiency.

Chapter 11 Energy Efficiency. The building thermal envelope shall comply with the minimum insulation requirements in 23.85.Table R11 or the International Energy Conservation Code as adopted under Title 23.60. When the area of the exterior wall glazing exceeds 18 percent of the conditioned floor area, the building thermal envelope shall be verified at plan review that a minimum AHFC 4-star plus rating can be achieved.

23.85.Table R11 Minimum Insulation R-Value [(hrft2degF)/Btu].

	Glazing ^a	Ceilings	Walls	Basement Walls	Crawlspace Walls	Exposed Floors Above Grade (Cantilevered Floors)	Foundation Walls with Slab Floors
Minimum R-Value	R-2.85	R-38	R-19	R-19	R-19	R-30	R-8

a. The maximum allowable U Factor is 0.35.

23.85. Chapters 12-42.

Amend by deleting in their entirety Mechanical, Plumbing and Electrical.

23.85. Appendix.

Adopt Appendices E and K.

23.85.AE101.1 General.

Amend the first sentence to read:

These provisions shall apply to manufactured homes, mobile homes, campers, and travel trailers serving as detached single-family dwelling units placed either on private (nonrental) lots or within mobile home parks licensed by the Municipality of Anchorage, and shall apply to the following:

Add the following section:

23.85.AE102.7 Mobile homes, campers, and travel trailers.**23.85.AE102.7.1 Mobile homes.**

Every mobile home built prior to June 15, 1976, shall be labeled as required in Section A201, and shall conform to all of the following:

1. FIRE WARNING SYSTEM - Smoke detectors shall be provided with in accordance with R317.
2. FIRE PROTECTION – Each mobile home shall be equipped with at least one 2-A rated portable fire extinguisher installed in accordance with NFPA 10-98.
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 facilities shall be maintained in a safe condition. Additions, alterations, repairs and replacements shall comply with manufacturer's instructions and the currently adopted edition of the International Mechanical Code. Gas piping shall conform to the currently adopted edition of 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 INTERRUPTER CIRCUIT - Every mobile home shall have every electrical circuit serving bathroom, kitchen, and ground level service outlets protected by a ground fault interrupter circuit 1, as required by Article 550-8(b) of the National Electrical Code.

23.85.AE102.7.2 Campers and travel trailers.

Campers and travel trailers moved into or relocated within the Municipality of Anchorage shall comply with:

1. All of the construction requirements of NFPA 501C, 1996 edition.
2. Items 1 through 6 of AMC 23.85.A102.7.1. Any camper or travel trailer not located within a licensed Camper Park shall not be occupied as a residence more than 14 days at a time for a total of more than 30 days in any twelve month period.

23.85.AE201 Definitions.

Add the following:

CAMPER PARK. A tourist facility approved by the Municipality for use by dependent and independent recreational vehicles, including motor homes, pickup campers, travel trailers, tent campers and similar recreational vehicles as opposed to a mobile home park which is licensed to accommodate mobile homes.

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.

Add the following at the end of the first paragraph in the definition of MANUFACTURED HOME:

Each manufactured home shall bear a certification label in accordance with the Manufactured Home Standards.

Add the following at the end of the first sentence of the second paragraph in the definition of MANUFACTURED HOME:

..., and the mobile home shall conform to section 23.85.A102.7.

Add the following to the definition of Manufactured Home Standards:

Every manufactured home installed in the Municipality of Anchorage must be certified for the "North Zone" (40 pounds per square foot) for snow load and heat loss "Comfort Zone 3" in accordance with HUD standards.

23.85.AE301.1 Initial installation.

Add the following after the word "be" in the first sentence of the first paragraph:

...relocated, moved,...

23.85.AE301.5 Gas and plumbing service.

Add a new section:

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.AE302.4 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.AE307 Utility service.

Add the following sentence:

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.AE502.3 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 on privately owned (nonrental) lots, unless a greater depth is required by the Building Official based on a foundation investigation or other information. Footings or piers in mobile home parks may be placed at surface grade, provided all other requirements are met.

23.85.AE502.6 Under-floor clearances-ventilation and access.

Add to the second paragraph the following:

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.AE503.1 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 floorline to exterior grade with a skirting material having a 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.AE604.1 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.

CHAPTER 23.95 RELOCATABLE ANCILLARY BUILDINGS.

Sections

23.95.100 Building permit: exemption

23.95.200 Requirements for building permit

23.95.300 Definitions

23.95.100 Building permit: exemption.

Relocatable ancillary buildings, which meet the requirements of section 23.95.200 qualify for a building permit. Relocatable ancillary buildings are exempt from the requirements of section 102.6, moved buildings, and section 102.7, temporary structures of the Anchorage Administrative Code, or any successor or local amendment thereto.

23.95.200 Requirements for building permit.

A relocatable ancillary building which meets all of the following requirements, qualifies for a building permit:

- A. The relocatable ancillary building shall comply with the provisions of the technical codes for new buildings or structures relating to fire, building and life safety concerns and are current as of the date of the building plan review, except the relocatable ancillary building is not required to have:

1. Plumbing facilities;
 2. Water service;
 3. Permanent foundation;
 4. Active fire alarm system, provided the relocatable ancillary building is less than 1,000 square feet in size and has at least two exit door openings;
 5. Fire sprinkler system; or
 6. Accessibility for the disabled, provided a similar education program is offered in the permanent building accessible to the disabled.
- B. The relocatable ancillary building must be secured to prevent overturning or sliding by lateral forces, including wind, and to minimize movement during seismic activities.
- C. A plan for the proposed location of the relocatable ancillary buildings shall be approved by the municipal Fire Department and the Building Safety Division of the Department of Development Services.
- D. An electrical permit and reinspection for the relocatable ancillary building is required following each relocation thereof.
- E. A plumbing permit and reinspection for any relocatable ancillary building having plumbing facilities or water service is required following each relocation thereof.

23.95.300 Definitions.

- A. *Relocatable ancillary building* means a publicly or privately owned moveable educational classroom or support facility meeting the Group E occupancy definition of the Building Codes contained in title 23 and constructed for multi-year use in conjunction with one or more publicly or privately owned permanent building and which meets all of the following criteria:
1. Is a public or private educational facility which serves a public education purpose;
 2. Is ancillary to a permanent building and serves the same general purpose and function as the permanent building;
 3. Is located in close proximity to the permanent building; and
 4. Is used as a classroom for students who have access to the plumbing facilities and water service of the permanent building or is used as a storeroom solely for classroom supplies.

CHAPTER 23.100 MOBILE AIRCRAFT SHELTERS.

Sections:

23.100.010	General
23.100.020	Location
23.100.030	Occupancy
23.100.040	Authorized Activities
23.100.050	Unauthorized Activities
23.100.060	Heating Methods
23.100.070	Area and Height Limitations
23.100.080	Design

1	23.100.090	Utilities
2	23.100.100	Foundations
3	23.100.110	Anchorage
4	23.100.120	Structural Strength
5	23.100.130	Exits
6	23.100.140	Protective Finish

7
8 **Section 23.100.010. General.** Notwithstanding other requirements of this code, mobile
9 structures for the housing of aircraft may be moved and maintained subject to the
10 requirements set forth in this section.
11

12 **Section 23.100.020. Location.** Existing Mobile Aircraft Shelters (shelters) may be
13 relocated on municipal airports. No such shelter shall be located closer than twenty (20)
14 feet from any permanent building, mobile home or lot line, except where lot lines are along
15 streets or aircraft taxiways where the twenty (20) feet may be measured from the centerline
16 of the right of way; and except where such shelters are situated in a configuration providing
17 periodic fire breaks in conformity with required building and fire codes. The location of
18 each structure shall also comply with the requirements of title 21.
19

20 **Section 23.100.030. Occupancy.** Mobile Aircraft Shelters shall be used only for the
21 following authorized purposes:

- 22 A. Storage of personal or business use aircraft and related spare parts;
23 B. Storage or use of tools subject to the limitations contained in this chapter; and
24 C. Minor maintenance or repair of aircraft by their owners or contract/licensed
25 mechanics.
26

27 **Section 23.100.040. Authorized Activities.** Authorized activities shall include storage or
28 maintenance of the following:

- 29 A. Storage of an aircraft for personal or business use, or in the case of smaller aircraft,
30 more than one aircraft;
31 B. Hand tools and small power tools required to support authorized activities;
32 C. Spare parts such as:
33 1. tires and wheels
34 2. propellers
35 3. seats
36 4. avionics
37 5. hardware
38 6. wire and wiring supplies
39 7. lamps
40 8. small structural sections
41 9. personal and cargo parachutes, including packing and repairs to parachutes.
42 D. Work benches and shelves;
43 E. Storage cabinets;
44 F. Aircraft ingress winches and required electrical and communications utilities to
45 support the same;
46 G. Routine cleaning of aircraft parts or the shelter;

- H. Minor aircraft repairs, adjustments, and configurations;
- I. Inspections, including annual inspections;
- J. Installation or changing, or changing calibration of avionics;
- K. Replacement of control surfaces, axles, bearings and aircraft accessories including but not limited to generators, alternators, fuel pumps, oil and vacuum pumps, magnets, batteries, cylinder heads and cylinder barrel replacement;
- L. Open houses and posting signs for the purpose of showing or selling or subleasing a mobile aircraft shelter;
- M. Storage of snowblowers or snow removal equipment;
- N. Storage of compressors and related tools;
- O. Unused oil not to exceed two (2) cases or ten (10) gallons;
- P. Aircraft fuel in the aircraft tanks;
- Q. Lubricants in factory containers;
- R. Emergency electrical generators;
- S. Seasonal equipment such as ice augers, survival equipment and non-commercial fishing equipment; and
- T. Personal vehicles in place of the aircraft when the aircraft is flying.

Section 23.100.050. *Unauthorized Activities.* Mobile aircraft shelters shall not be used for any of the following:

- A. Commercial activities including but not limited to:
 - 1. performing for hire annual inspections for other aircraft owners;
 - 2. commercial basing of aircraft for the purposes of guiding, air cargo or commuter operations where the mobile aircraft shelter is used for ancillary uses other than the actual storage of this aircraft; and
 - 3. commercial basing of aircraft for instructional purposes when the mobile aircraft shelter is used for purposes other than only storage of the aircraft.
- B. Major repairs, including engine tear downs;
- C. Welding of any kind;
- D. Painting except for minor touch up painting utilizing small, hand-held spray cans;
- E. Storage of non-aviation related products including but not limited to:
 - 1. furniture not related to authorized shelter uses;
 - 2. unrelated business records or files;
 - 3. equipment, tools, or other items of household or business use;
 - 4. vehicles not otherwise allowed, including snowmachines, motorcycles, all-terrain vehicles, automobiles, trucks;
 - 5. boats, except for rubber rafts and their motors;
 - 6. campers and camper shells;
 - 7. mobile homes;
 - 8. trailers;
 - 9. commercial generators and welders;
 - 10. used oil;
 - 11. fuel in drums or portable containers in excess of a total of five (5) gallons;
 - 12. hydraulic oil in excess of a total of one (1) gallon.

Section 23.100.060. Heating Methods. Heating mobile aircraft shelters may be provided as follows:

- A. The following may be used as methods of heating authorized aircraft, vehicle, equipment or shelters:
 - 1. electric block-type with UL approval for such purposes;
 - 2. pan adhesion with UL approval for such purposes;
 - 3. individual catalytic heaters with UL approval for such purposes; and
 - 4. Forced air sealed combustion chamber heaters using outside combustion air connected to natural gas, *provided* such heaters are UL approved and are designed, installed and operated in conformity with applicable building and fire codes.
- B. The following shall not be used as methods of heating aircraft, vehicles, equipment or shelters:
 - 1. open flame heaters of any kind;
 - 2. propane heaters;
 - 3. diesel fired heaters; and
 - 4. "salamander" or kerosene catalytic heaters.

Section 23.100.070. Area and Height Limitations. Individual shelters shall not exceed two thousand five hundred (2,500) square feet of usable floor area. Where two or more shelters are grouped together (or "nested" in "T-Hangar" configuration), the total gross floor area of such grouping shall not exceed twenty thousand (20,000) square feet on non-combustible construction without an approved area separation wall.

- A. Adjacent shelters may be joined with non-combustible materials of similar design to original construction providing that they are separated by a one (1) hour rated fire door and applicable hardware. All floors shall be ground level, and no balcony or mezzanine floors shall be permitted, except that the areas which are not in the landing gear "footprint" may be insulated with insulfoam covered with plywood where said exposed materials are covered with an approved, rated, fire retardant coating.
- B. Minimum spacing between groupings of shelters shall be sixty-five (65) feet, except when an area separation wall is provided as noted above and in concert with applicable building and fire codes. Maximum height of any portion of the structure above grade shall be twenty-five (25) feet, and subject to the appropriate, approved and adopted airport height zoning map.

Section 23.100.080. Design. Shelters may be constructed of any non-combustible materials permitted by this code. Adequacy of design shall be evidenced by International Conference of Building Officials (ICBO) Research Report, computations by a registered engineer in the State of Alaska, or other additional information such as manufacturer's specification sheets and test results, subject to the approval of the building official.

Section 23.100.090. Utilities. Shelters may be connected to electrical, communications and natural gas utilities provided all devices utilized and all methods of installation and use meet the appropriate building codes and Municipal amendments thereto. If shelters are required in the future to be connected to water and/or sewer, and when and if such a requirement is

perceived to exist, the Building Official shall provide guidance and where deemed appropriate and in the public interest, issue appropriate permits.

Section 23.100.100. Foundations. Shelters shall be founded on a concrete slab with a sufficient sill between each unit to prevent liquid from flowing from one unit to another unit with appropriate anchorage for the units into the concrete slab. Maximum soil pressures shall be in accordance with this code.

Section 23.100.110. Anchorage. Shelters shall be anchored to resist uplift and lateral forces. Anchors shall resist various forces through gravity and soil pressures. The suitability and capacity of anchors shall be established by appropriate test reports or computations. Anchors shall be installed in accordance with the manufacturer's recommendations.

Section 23.100.120. Structural Strength. Existing shelters are grandfathered. Any modifications to existing shelters shall be designed and constructed to meet criteria as required by the building code.

Section 23.100.130. Exits. Exit requirements for portable aircraft shelters shall be as required in the building code.

Section 23.100.140. Protective Finish. Shelters shall have protective finishes required by building code on exposed surfaces.

CHAPTER 23.105 GRADING, EXCAVATION AND FILL.

Sections

Section 23.105.101	Purpose
Section 23.105.102	Scope
Section 23.105.103	Permits required
Section 23.105.104	Hazards
Section 23.105.105	Definitions
Section 23.105.106	Grading permit requirements
Section 23.105.107	Grading fees
Section 23.105.108	Bonds
Section 23.105.109	Cuts
Section 23.105.110	Fills
Section 23.105.111	Setbacks
Section 23.105.112	Drainage and terracing
Section 23.105.113	Erosion control
Section 23.105.114	Grading inspection
Section 23.105.115	Completion of work

Section 23.105.101 Purpose.

The purpose of this section is to safeguard life, limb, property and the public welfare by regulating grading on public or private property.

Section 23.105.102 Scope.

This section sets forth rules and regulations to control excavation and earthwork construction, including fills and embankments; establishes the administrative procedure for issuance of permits; and provides for approval of plans and inspection of grading construction.

The standards listed below are recognized standards.

1. Testing.

- 1.1. ASTM D 1557, Moisture-Density Relations of Soils and Soil Aggregate Mixtures
- 1.2. ASTM D 1556, In Place Density of Soils by the Sand-Cone Method
- 1.3. ASTM D 2167, In Place Density of Soils by the Rubber-Balloon Method
- 1.4. ASTM D 2937, In Place Density of Soils by the Drive-Cylinder Method
- 1.5. ASTM D 2922 and D 3017, In Place Moisture Content and Density of Soils by Nuclear Methods

Section 23.105.103 Permits required.

23.105.103.1 Permits required. Except as specified in section 23.105.103.2 below, no person shall do any grading without first having obtained a grading permit from the code official.

23.105.103.2 Exempted work. A grading permit is not required for the following:

1. When approved by the code official, grading in an isolated, self-contained area if there is no danger to private or public property.
2. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit.
3. Cemetery graves.
4. Refuse disposal sites controlled by other regulations.
5. Excavations for wells or tunnels or utilities.
6. Mining, quarrying, excavating, processing or stockpiling of rock, sand, gravel, aggregate or clay where established and provided for by law, provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property.
7. Exploratory excavations under the direction of soil engineers or engineering geologists.
8. An excavation:
(a) less than 2 feet (610 mm) in depth; or

- (b) does not create a cut slope greater than 5 feet (1524 mm) in height and steeper than 1 unit vertical in 2 units horizontal (50% slope).
9. A fill less than:
- (a) 1 foot (305 mm) in depth and placed on natural terrain with a slope flatter than 1 unit vertical in 5 units horizontal (20% slope); or
 - (b) less than 3 feet (914 mm) in depth, not intended to support structures, that does not exceed 50 cubic yards (38.3 m³) on any one lot and does not obstruct a drainage course.

Exemption from the permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

Section 23.105.104 Hazards.

Whenever the code official determines any existing excavation or embankment or fill on private property has become a hazard to life and limb, or endangers property, or adversely affects the safety, use or stability of a public way or drainage channel, the owner of the property upon which the excavation or fill is located, or other person or agent in control of said property, upon receipt of notice in writing from the code official, shall within the period specified therein repair or eliminate such excavation or embankment to eliminate the hazard and to be in conformance with the requirements of this code.

Section 23.105.105 Definitions.

For the purposes of this code, the definitions listed hereunder shall be construed as specified in this section.

Approval shall mean the proposed work or completed work conforms to this chapter in the opinion of the code official.

As-graded is the extent of surface conditions on completion of grading.

Bedrock is in-place solid rock.

Bench is a relatively level step excavated into earth material on which fill is to be placed.

Borrow is earth material acquired from an off-site location for use in grading on a site.

Civil engineer is a professional engineer registered in the state to practice in the field of civil works.

Civil engineering is the application of the knowledge of the forces of nature, principles of mechanics and the properties of materials to the evaluation, design and construction of civil works.

Compaction is the densification of a fill by mechanical means.

Earth material is any rock, natural soil or fill or any combination thereof.

Erosion is the wearing away of the ground surface as a result of the movement of wind, water or ice.

Excavation is the mechanical removal of earth material.

Fill is a deposit of earth material placed by artificial means.

Geotechnical engineer. See *Soils engineer*.

Grade is the vertical location of the ground surface.

Grade, existing is the grade prior to grading.

Grade, finish is the final grade of the site that conforms to the approved plan.

Grade, rough is the stage at which the grade approximately conforms to the approved plan.

Grading is any excavating or filling or combination thereof.

Key is a designed, compacted fill placed in a trench excavated in earth material beneath the toe of a proposed fill slope.

Site is any lot or parcel of land or contiguous combination thereof, under the same ownership, where grading is performed or permitted.

Slope is an inclined ground surface the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

Soil is naturally occurring superficial deposits overlying bedrock.

Soils engineer (Geotechnical engineer) is an engineer experienced and knowledgeable in the practice of soils engineering (geotechnical) engineering.

Soils engineering (Geotechnical engineering) is the application of the principles of soils mechanics in the investigation, evaluation and design of civil works involving the use of earth materials and the inspection or testing of the construction thereof.

Terrace is a relatively level step constructed in the face of a graded slope surface for drainage and maintenance purposes.

Section 23.105.106 Grading permit requirements.

23.105.106.1 Permits required. Except as exempted in section 23.105.103.2, no person shall do any grading without first obtaining a grading permit from the code official. A separate permit shall be obtained for each site, and may cover both excavations and fills.

23.105.106.2 Application. The provisions of the Anchorage Administrative Code section 23.10.301 are applicable to grading. Additionally, the application shall state the estimated quantities of work involved.

23.105.106.3 Grading designation. Grading in excess of 5,000 cubic yards (3825 m³) shall be performed in accordance with the approved grading plan prepared by a civil engineer, and shall be designated as "engineered grading." Grading involving less than 5,000 cubic yards (3825 m³) shall be designated "regular grading" unless the permittee chooses to have the grading performed as engineered grading, or the code official determines special conditions or unusual hazards exist, in which case grading shall conform to the requirements for engineered grading.

23.105.106.3.1 Engineered grading requirements.

- A. Application for a grading permit shall be accompanied by two sets of plans and soils engineering reports. The plans and specifications shall be prepared by a civil engineer licensed by the State.
- B. Specifications shall contain information covering construction and material requirements.
- C. Plans shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations. The first sheet of each set of plans shall give location of the work, the name and address of the owner, and the person by whom they were prepared.
- D. The plans shall include the following information:
 - 1. General vicinity of the proposed site;
 - 2. Property limits and accurate contours of existing ground and details of terrain and area drainage;
 - 3. Limiting dimensions, elevations or finish contours to be achieved by the grading, and proposed drainage channels and related construction;
 - 4. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams and other protective devices to be constructed with, or as a part of, the proposed work, together with a map showing the drainage area and the estimated runoff of the area served by any drains;
 - 5. Location of any buildings or structures on the property where the work is to be performed and the location of any

buildings or structures on land of adjacent owners within fifteen (15) feet (4572 mm) of the property or that may be affected by the proposed grading operations;

6. Recommendations included in the soils engineering report shall be incorporated in the grading plans and specifications. When approved by the code official, specific recommendations contained in the soils engineering report, applicable to grading, may be included by reference;
7. The date of the soils engineering report together with the name, address and phone number of the firm or individual who prepared the report; and
8. An engineered grading special inspection program prepared by the engineers responsible for inspection. The program shall include a scope of work outlining the special inspector's duties, per sections 23.105.114.

23.105.106.4 Soils engineering report. The soils engineering report required by section 23.105.106.3.1 shall include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective measures, including buttress fills, when necessary, and opinion on adequacy for the intended use of sites to be developed by the proposed grading as affected by soils engineering factors, including the stability of slopes.

23.105.106.5 Liquefaction study. The geotechnical investigation shall include a liquefaction study when the following conditions exist:

- A. Shallow ground water, 50 feet (15240 mm) or less.
- B. Unconsolidated sandy alluvium.

23.105.106.6 Regular grading requirements. Each application for a grading permit shall be accompanied by two sets of plans in sufficient clarity to indicate the nature and extent of the work and compliance with the provisions of this code. The plans shall give the location of the work, the name of the owner and the name of the person who prepared the plan. The plan shall include the following information:

- A. General vicinity of the proposed site.
- B. Limiting dimensions and depth of cut and fill.
- C. Before and after contours
- D. Location of any buildings or structures where work is to be performed, and the location of any buildings or structures within fifteen (15) feet (4572 mm) of the proposed grading.

23.105.106.7 Issuance.

- A. The provisions of section 23.10.303 are applicable to grading permits. The code official may require grading operations and project designs be modified if delays occur which incur weather-generated problems not considered at the time the permit was issued.

- B. The code official may require special inspection and testing. The code official may require the grading to conform to engineered grading.

Section 23.105.107 Grading fees.

23.105.107.1 General. 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 jurisdiction.

23.105.107.2 Plan review fees. When a plan or other data are required to be submitted, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be as set forth in chapter 23.10, Table 3B. Separate plan review fees shall apply to retaining walls or major drainage structures. For excavation and fill on the same site, the fee shall be based on the volume of excavation or fill, whichever is greater.

23.105.107.3 Grading permit fees. A fee for each grading permit shall be paid to the code official as set forth in chapter 23.10, Table 3H. Separate permits and fees shall apply to retaining walls or major drainage structures. There shall be no separate charge for standard terrace drains and similar facilities.

Section 23.105.108 Bonds.

- A. The code official may require bonds in such form and amounts as may be deemed necessary to ensure the work, if not completed in accordance with the approved plans and specifications, shall be corrected to eliminate hazardous conditions.
- B. In lieu of a surety bond, the applicant may file a cash bond or instrument of credit with the code official in an amount equal to that required in the surety bond.

Section 23.105.109 Cuts.

23.105.109.1 General.

- A. Unless otherwise recommended in the approved soils engineering report, cuts shall conform to the provisions of this section. Cuts shall not cause a net increase in surface runoff or concentrated flow across property lines. Runoff shall discharge to approved locations or be retained on site.
- B. These provisions may be waived for minor cuts not intended to support structures.

23.105.109.2 Slope. The slope of cut surfaces shall be no steeper than 1 unit vertical in 2 units horizontal (50% slope) unless the permittee furnishes a soils engineering report, stating the site has been investigated and giving an opinion that a cut at a steeper slope is stable and does not create a hazard to public or private property.

Section 23.105.110 Fills.**23.105.110.1 General.**

- A. Unless otherwise recommended in the approved soils engineering report, fills shall conform to the provisions of this section. Fills shall not cause a net increase in surface runoff or concentrated flow across property lines. Run-off shall discharge to approved locations or be retained on site.
- B. In the absence of an approved soils engineering report, these provisions may be waived for minor fills not intended to support structures.

23.105.110.2 Preparation of ground.

- A. Fill slopes shall not be constructed on natural slopes steeper than 1 unit vertical in 2 units horizontal (50% slope).
- B. The ground surface shall be prepared to receive fill by removing vegetation, noncomplying fill, topsoil and other unsuitable materials and scarifying to provide a bond with the new fill.
- C. Where slopes are steeper than one (1) unit vertical in five (5) units horizontal (20% slope) and the height is greater than five (5) feet (1524 mm), by benching into sound bedrock or other competent material as determined by the soils engineer. The bench under the toe of a fill on a slope steeper than one (1) unit vertical in five (5) units horizontal (20% slope) shall be at least ten (10) feet (3048 mm) wide.
- D. **Exception:** When based on a geotechnical engineer's recommendation and designed by a civil engineer, parking lots may be constructed by placing structural fill over peat. A geotechnical site investigation is required prior to future buildings being constructed on such sites to determine the amount of peat to be removed below the building footprint.

23.105.110.3 Fill material. Fill material shall not include organic, frozen, or other deleterious material. No rock or similar irreducible material with a maximum dimension greater than twelve (12) inches (305 mm) shall be buried or placed in fills.

23.105.110.4 Compaction. All fills shall be placed in lifts not exceeding 12 inches and compacted to a minimum of ninety percent (90%) of maximum density. Fills under building footprints, driveways, and parking lots shall be placed in lifts not exceeding 12 inches and compacted to ninety-five percent (95%) of maximum density.

23.105.110.5 Slope. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes shall be no steeper than one (1) unit vertical in two (2) units horizontal (50% slope).

Section 23.105.111 Setbacks.

23.105.111.1 General. Cut and fill slopes shall be set back from site boundaries in accordance with this section. Setback dimensions shall be horizontal distances measured perpendicular to the site boundary.

23.105.111.2 Top of cut slope. The top of cut slopes shall not be made nearer to a site boundary line than one-fifth of the vertical height of cut with a minimum of two (2) feet (610 mm) and a maximum of ten (10) feet (3048 mm). The setback may need to be increased for any required interceptor drains.

23.105.111.3 Toe of fill slope. The toe of fill slopes shall be made not nearer to the site boundary line than one-half the height of the slope with a minimum of two (2) feet (610 mm) and a maximum of twenty (20) feet (6096 mm). Where a fill slope is to be located near the site boundary and the adjacent off-site property is developed, special precautions shall be incorporated in the work as the code official deems necessary to protect the adjoining property from damage as a result of such grading.

These precautions may include but are not limited to:

- A. Additional setbacks.
- B. Provision for retaining or slough walls.
- C. Mechanical or chemical treatment of the fill slope surface to minimize erosion.
- D. Provisions for the control of surface waters.

23.105.111.4 Modification of slope location. The code official may approve alternate setbacks. The code official may require an investigation and recommendation by a qualified engineer to demonstrate the intent of this section has been satisfied.

Section 23.105.112 Drainage and terracing.

23.105.112.1 General. Unless otherwise indicated on the approved grading plan, drainage facilities and terracing shall conform to the provisions of this section for cut or fill slopes steeper than one (1) unit vertical in three (3) units horizontal (33.3% slope).

23.105.112.2 Terrace.

- A. Terraces at least six (6) feet (1829 mm) in width shall be established at not more than thirty (30) foot (9144 mm) vertical intervals on all cut or fill slopes to control surface drainage and debris except where only one terrace is required, it shall be at midheight. For cut or fill slopes greater than sixty (60) feet (18 288 mm) and up to one hundred twenty (120) feet (36 576 mm) in vertical height, one terrace at approximately midheight shall be twelve (12) feet (3658 mm) in width. Terrace widths and spacing

for cut and fill slopes greater than 120 feet (36 576 mm) in height shall be designed by the civil engineer and approved by the code official. Suitable access shall be provided to permit proper cleaning and maintenance.

- B. Swales or ditches on terraces shall have a minimum gradient of five percent (5%). They shall have a minimum depth at the deepest point of one (1) foot (305 mm).
- C. A single run of swale or ditch shall not collect runoff from a tributary area exceeding 13,500 square feet (1254.2 m²) (projected) without discharging into a down drain.

23.105.112.3 Subsurface drainage. Cut and fill slopes shall be provided with subsurface drainage as necessary for stability.

23.105.112.4 Disposal.

- A. All drainage facilities shall be designed to carry waters to the nearest practicable drainage way approved by the code official or other appropriate jurisdiction as a safe place to deposit such waters. Erosion of ground in the area of discharge shall be prevented by installation of nonerosive down-drains or other devices.
- B. Footing drains or sump pumps shall discharge to a ditch or storm sewer for new construction where available. Backup emergency systems may discharge to the surface. Primary systems shall not discharge onto adjacent properties. Where sump pumps or footing drains discharge on the soil surface, the effluent shall be directed toward drainage easements, street gutters, ditches or other approved locations. Effluent may be retained on site to prevent impacts to neighboring properties.
- C. Building pads shall have a drainage gradient of two percent (2%) toward approved drainage facilities, unless waived by the code official.
- D. **Exception:** The gradient from the building pad may be one percent (1%), if all of the following conditions exist throughout the permit area:
 - 1. No proposed fills are greater than ten (10) feet (3048 mm) in maximum depth; and
 - 2. No proposed finish cut or fill slope faces have a vertical height in excess of ten (10) feet (3048 mm); and
 - 3. No existing slope faces steeper than one (1) unit vertical in ten (10) units horizontal (10% slope) have a vertical height in excess of ten (10) feet (3048 mm).

23.105.112.5 Drainage across property lines. Drainage across property lines shall not exceed that which existed prior to grading. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Erosion of the ground in the area of discharge shall be prevented by installation of nonerosive down drains or other devices.

1 **23.105.112.6 Interceptor drains.** Interceptor drains shall be installed along the
2 top of all cut and fill slopes where the tributary drainage area above slopes
3 toward the cut or fill and has a drainage path greater than forty (40) feet (12 192
4 mm) measured horizontally. The slope of the drain shall be 5% unless otherwise
5 approved by the code official.
6

7 **Section 23.105.113 Erosion control.**
8

9 **23.105.113.1 Slopes.** The faces of cut and fill slopes shall be prepared and
10 maintained to control against erosion. This control may consist of effective
11 planting. The protection for the slopes shall be installed as soon as practicable
12 and prior to calling for final approval. Where cut slopes are not subject to
13 erosion due to the erosion-resistant character of the materials, such protection
14 may be omitted.
15

16 **23.105.113.2 Other devices.** Where necessary, check dams, cribbing, riprap or
17 other devices or methods shall be employed to control erosion and provide safety.
18

19 **Section 23.105.114 Grading inspection.**
20

21 **23.105.114.1 General.** Grading operations requiring a permit shall be subject to
22 inspection by the code official. Engineered grading requires special inspection in
23 accordance with the International Building Code section 1704.7. Regular grading
24 may require special inspection as deemed necessary by the code official.
25

26 **23.105.114.2 Permittee.**

- 27 A. The permittee shall be responsible for the work to be performed in
28 accordance with the approved plans and specifications, and in conformance
29 with the provisions of this code.
30 B. The permittee shall act as a coordinator between consultants, the contractor
31 and the code official.
32 C. In the event of changed conditions, the permittee shall be responsible for
33 informing the code official of such change and shall provide revised plans
34 for approval.
35 D. The permittee shall monitor the progress of the work.
36 E. For engineered grading, the permittee shall schedule inspections at the start
37 of work, fifty percent (50%) completion, one hundred percent (100%)
38 completion, and at significant stages outlined by the design consultants.
39 F. For regular grading, the permittee shall schedule inspections at fifty percent
40 (50%) completion and one hundred percent (100%) completion.
41 G. For engineered grading, the permittee shall provide the special inspection
42 reports to the Building Safety inspector during required inspections.
43

44 **23.105.114.3 Building Safety inspector.** The Building Safety inspector shall
45 inspect the project at the various stages of work requiring approval to determine
46 adequate control is being exercised. The Building Safety inspector may require a

survey to be performed or test holes to be dug or soils tests to be performed to verify the work complies with the approved plans and applicable code requirements.

23.105.114.4 Notification of noncompliance. If a special inspector finds the work is not being done in conformance with this chapter or the approved grading plans, the discrepancies shall be reported immediately in writing to the permittee and to the Building Safety inspector.

Section 23.105.115 Completion of work.

23.105.115.1 Notification of completion. The permittee shall notify the Building Safety inspector when the grading operation is ready for final inspection. Final approval shall not be given until all work, including installation of all drainage facilities, their protective devices, and all erosion-control measures, are completed in accordance with the final approved grading plan, and the required reports have been submitted.

CHAPTER 23.110 LOCAL AMENDMENTS TO THE INTERNATIONAL FUEL GAS CODE 2006 EDITION

Sections

23.110.100	Local amendments to the International Fuel Gas Code, 2006 Edition
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23.110.103 – 23.110.109	
23.110.110	Authority to render gas service
23.110.202	General definitions
23.110.303.3	Prohibited locations
23.110.303.4	Protection from damage
23.110.303.8	Liquefied petroleum gas facilities
23.110.304.6	Outdoor combustion air
23.110.304.8	Engineered installations
23.110.304.10	Louvers and grilles
23.110.304.11	Combustion air duct
23.110.304.13	LPG systems
23.110.305.3	Elevation of ignition source
23.110.305.9	Aircraft hangars
23.110.306.3	Appliances in attics
23.110.306.4	Appliances under floors
23.110.306.5	Appliances on roofs or elevated structures
23.110.306.5.2	Electrical requirements
23.110.306.7	Mezzanines and platforms
23.110.403.10.1	Pipe joints
23.110.403.10.2	Tubing joints
23.110.403.10.4	Metallic fittings

31		
32	23.110.100	Local amendments to the International Fuel Gas Code, 2006
33		Edition.

38
39 **23.110.101.2 Scope.**
40 Delete the exception.

40	Delete the exception.
----	-----------------------

43 Delete sections 103 through 109.

46

1 Add new sections to read as follows:

2 **110.1 Unlawful acts.** It shall be unlawful for any person, firm, or corporation,
3 excepting an authorized agent or employee of a person, firm, or corporation
4 engaged in the business of furnishing or supplying gas and whose service pipes
5 supply or connect with the particular premises, to turn on or reconnect gas service
6 in or on any premises where and when gas service is, at the time, not being
7 rendered.

8
9 **110.2 Authority to disconnect.** The administrative authority or the serving gas
10 supplier is hereby authorized to disconnect any gas piping or appliance, or both,
11 found not to conform to the requirements of this code or found defective and in
12 such condition as to endanger life or property. Where such disconnection is
13 made, a notice shall be attached to such gas piping, appliance, or both stating the
14 same has been disconnected, together with the reasons therefore.

15
16 **23.110.202 General definitions.**

17
18 Add a new definition as follows:

19 **Connector fuel gas piping.** A fitting that is used at all points where fuel gas
20 piping enters or leaves the ground. Connector shall be capable of absorbing a
21 displacement due to frost heave action. An example for low pressure systems
22 would be a Dormont flex. An example for medium pressure would be CSST. An
23 example for diameters greater than two inches would be a braided metal flex
24 connector. (See amendment to section 404 Piping System Installation.) Rubber
25 flexible connectors are not approved.

26
27 **23.110.303.3 Prohibited locations.**

28
29 Amend section by deleting Exceptions 2, 3, and 4, and add new Item No. 6, as follows:

- 30 6. Domestic gas-fired clothes dryers may be installed in bathrooms if
31 provided with make-up air in accordance with section 614.5.

32
33 **23.110.303.4 Protection from damage.**

34
35 Add the following section:

36 **303.4.1 Appliances subject to vehicle impact.** Appliances, including their
37 associated piping and ductwork, subject to vehicle impact shall be protected by
38 one or more of the following methods:

- 39 1 Install the appliance on a platform a minimum of 24 inches high. The
40 appliance shall not extend beyond the face of the platform. Piping and
41 ductwork shall not be surface mounted to the platform in a location
42 subject to vehicle impact.
43 2. Protect the appliance with a barrier. The barrier shall be a minimum of
44 30" high and be constructed of a minimum 2" diameter schedule 40 steel
45 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 3 $\frac{1}{2}$ " 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.
 4. 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 new section as follows:

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 means 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 gas 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 Engineered installations.

Add a new section as follows:

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.

Combustion air is air required for stoichiometric combustion, plus excess air, plus flue dilution air.

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 one-half (1/2) inch mesh, except as provided in section 304.8.1.7.3.

Exception: Combustion air openings serving a nonresidential portion of a building may be covered with a screen having openings larger than one-half (1/2) inch but in no case larger than one (1) 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 Under-floor supply. Combustion and ventilation air openings may connect with under-floor areas conforming to the following requirements:

1. Under-floor spaces having unobstructed openings to the exterior, sized to not exceed the maximum system static pressure requirements specified in sections 304.8.1.9 and 304.8.1.10.
2. The height of the under-floor space shall comply with the requirements of the Building Code and be without obstruction to the free flow of air.

304.8.1.6.3 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.

304.8.1.6.4 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 chapter 6 or equivalent corrosion-resistant material approved for this use.
2. Have a minimum cross-sectional dimension of three inches (3").
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.

304.8.1.7.3 Screen. Neither end of the ducts terminating in an attic shall be screened.

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.

Table No. 304.8.1.1 Combustion Air System Design Criteria.

Fuels	System Static Pressure Limits ¹			Combustion Air Requirements
	Atmospheric		Forced Draft	
	Draft Hoods	Barometric Dampers		All Types
GAS (Natural, Propane, Butane)	0.02" WG	0.02" WG	0.05" WG	<u>24 CFM</u> 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 CF/1000 Btu

GAS: $\frac{9.6 \text{ cu. ft. air}}{1 \text{ cu. ft. gas}} \times \frac{1 \text{ cu. ft. gas}}{1000 \text{ Btu}} = \frac{9.6 \text{ cu. ft. air}}{1000 \text{ Btu}}$ (14.4 @ 50% excess)

*Air at 2000 feet above sea level. Installations above this shall derate appliance output 4%/1000 feet.

EXAMPLE: Combustion Air Flow Rates (CFM) per 100,000 Btuh input. Verify heating values and adjust CFM as required.

STOICHIOMETRIC
0% EXCESS AIR

COMBUSTION
@ 50% EXCESS AIR

Natural Gas	<u>16.0 CFM</u>	<u>24 CFM</u>
1000 Btu/cu. ft.	100,000 Btuh	100,000 Btuh

23.110.304.10 Louvers and grilles.

Delete the words “not smaller than 1/4 inch” and replace with “of one-half inch (½”) for residential and one-half inch (½”) up to one inch (1”) for commercial applications.”

23.110.304.11 Combustion air duct.

Delete the exception to Item 1.

Delete Item 5 and replace with:

Combustion air shall not be obtained from the attic, unless prior written approval is obtained from the authority having jurisdiction.

Insert the following words at the beginning of Item 8:

Due to a one foot (1') anticipated snow depth...

Change the reference of twelve (12) inches to twenty-four (24) inches in Item 8.

23.110.304.13 LPG systems.

Add new 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 underfloor 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, S-1 and S-2 occupancies with overhead doors providing access to vehicles and equipment containing combustible fuel shall comply with this section.

Ignition sources shall include any mechanical or electrical device capable of generating a spark, glow or flame.

23.110.305.9 Aircraft hangars.

Amend by adding a new section as follows:

305.9 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 enclosures 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.

23.110.306.3 Appliances in attics.

Add Exception #3 as follows:

3. The passageway and level surface are not required for replacement of horizontal furnaces located above drop ceilings in strip malls. All other code requirements apply.

23.110.306.4 Appliances under floors.

Amend by adding the following as the first sentence:

Installation of appliances in underfloor crawlspaces is prohibited unless prior written approval is obtained from the administrative authority.

23.110.306.5 Appliances on roofs or elevated structures.

Amend by deleting section 306.5 and replace with the following:

Where new or replaced equipment and appliances requiring access are installed on roofs or elevated structures of new or existing buildings, such access shall be provided by a permanent approved means of access, the extent of which shall be from grade or floor level to the equipment and appliances' level service space. Such access shall be located interior to the building and shall not require climbing over obstructions greater than thirty (30) inches high or walking on roofs having a slope greater than four (4) units vertical in twelve (12) units horizontal (33-percent slope).

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

1. Ladders having rung spacing not to exceed fourteen (14) inches on center.
2. Ladders shall have a toe spacing not less than six (6) inches deep.
3. There shall be a minimum of eighteen (18) inches between rails.
4. Rungs shall give a minimum 0.75-inch diameter and be capable of withstanding a 300-pound load.
5. Ladders over thirty (30) feet in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot.

Catwalks installed to provide the required access shall be not less than twenty-four (24) inches wide and shall have railings as required for service platforms.

Exceptions:

1. Replaced equipment may be accessed by portable ladder on the single story portion of an existing building not exceeding sixteen (16) feet in height. If the existing building exceeds sixteen (16) feet in height, an approved interior access shall be provided.
2. This section shall not apply to Group R-3 occupancies.
3. Existing buildings with an existing approved exterior access that is permanently mounted to the structure.

23.110.306.5.2 Electrical requirements.

Revise the sentence to read:

A receptacle outlet shall be provided as required by the NEC.

23.110.306.7 Mezzanines and platforms.

Add a new section as follows:

306.7 Mezzanines and platforms. Every mezzanine or platform more than ten (10) feet six (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 Local Amendment 23.110.306.5.

23.110.403.10.1 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 2 ½ inches or larger.
2. The pipe is installed under a driveway.
3. Medium pressure systems.

23.110.403.10.2 Tubing joints.

Amend by adding 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 sixty (60) feet. All pipe to tubing transitions shall be made above ground.

23.110.403.10.4 Metallic fittings.

Amend Item 2 by deleting the words "cast iron."

Delete Item 5.

Add a new Item 9 as follows:

9. **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.

23.110.404.4 Piping through foundation wall.

Delete paragraph in its entirety and replace with the following:

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

23.110.404.9 Minimum burial depth.

Delete the wording "except as provided for in Section 404.9.1"

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

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

23.110.404.9.1 Individual outside appliances.

Delete this section.

23.110.404.17 Ground penetrations.

Add a new section as follows:

404.17 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 six-inch (6") displacement, in any direction, due to frost heave action.

23.110.404.18 Fuel gas piping connectors.

Add a new section as follows:

404.18 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.

23.110.404.19 Frost heave protection for copper tubing.

Add a new section as follows:

404.19 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 six-inch radius loop, or listed fuel gas piping connector of equal size.

23.110.406.4.1 Test pressure.

Replace the reference to “1 ½” with “ten (10)”.

Replace the minimum test pressure of three (3) psig with ten (10) psig and add the following sentences at the end of the paragraph:

Required pressure tests of ten (10) psig shall be performed with gauges of 1/10 psi increments or less.

Welded pipe shall be tested with not less than sixty (60) psig test pressures.

23.110.406.8 Temporary gas provisions.

Add a new section as follows:

The installation of temporary gas shall comply with sections 406.8.1 and 406.8.2.

23.110.406.8.1 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 “decorator 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 one-quarter inch (¼”) 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 five (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 ten (10) feet from the furnace.
- F. Portable space heaters shall be provided with one hundred percent (100%) 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. If the

regulator vent discharges, it shall not be allowed to 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 sixty (60) psi air pressure.

23.110.406.8.2 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.

23.110.411.2 Manufactured home connections.

Add the following item to the section:

4. Pounds to inches water column regulators serving mobile homes and connected to copper tubing shall be attached to the exterior of the mobile home, and shall not be located under the mobile home.

23.110.501.7 Connection to fireplace.

Add the following sentence to section 501.7:

Gas fired appliances shall not be connected to fireplace chimneys without prior approval of the Administrative Authority.

23.110.501.8 Equipment not required to be vented.

Delete Item 8.

23.110.502.8 Enclosure required.

Add the following section:

502.8 Enclosure required. Venting systems installed exterior to the building outside the 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 Protection from sliding snow and ice.

Add the following section:

502.9 Protection from sliding snow and ice. Vent terminations penetrating a metal roof with a pitch shall be protected by an ice dam or deflector of an approved type acceptable to the Administrative Authority.

23.110.503.3.6 Above ceiling air handling spaces.

Add the following sentence to Item No. 1:

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.

23.110.503.6.13 Gypsum wall board (sheetrock) clearances.

Amend by adding a new section as follows:

503.6.13 Gypsum wall board clearances. GWB shall be considered a noncombustible material when determining minimum required clearances. It should be noted GWB cannot be used to reduce clearances to combustibles. For example, B vent shall be installed with a one inch (1") minimum clearance from wood, even if the wood is covered with GWB.

23.110.503.8 Venting system termination location.

Amend by adding new Item 5 to read as follows:

5. An anticipated snow depth of twelve inches (12") shall be used when determining the manufacturer's minimum vent termination height. Measurements shall be made to the bottom of the vent outlet.

23.110.503.16 Common vents for multiple appliances.

Add a new section as follows:

503.16 Common vents for multiple appliances. When venting 3 or more Category I appliances, the common vent shall be a minimum Type "B" double wall.

23.110.504.2.9 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.

Delete the following words:

“and the appliances shall be interlocked with an exhaust hood system to prevent appliance operation when the exhaust hood system is not operating.”

Add the following to the end of the last sentence:

“unless part of the listed system.”

23.110.614.6.1 Maximum length.

Amend by adding a new paragraph to the beginning of Exception #1:

The maximum length of a clothes dryer exhaust duct may be increased when necessary due to location of the dryer in relationship to an exterior wall or roof; however, the length shall not exceed the dryer manufacturer's recommendations. When exceeding the code required maximum length, a dryer placard (available at the Building Safety Division handout shelves) stating the length of the run and the amount of ninety (90) degree elbows shall be posted on the wall next to the dryer exhaust connection. The placard shall be laminated or in a moisture resistant sleeve and be secured using screws, staples, or thumbtacks. Push pins are not acceptable. The duct shall be routed using the shortest possible distance and/or least number of (45) and (90) degree elbows as possible.

Add a new Exception #2:

Exception #2: For distances exceeding the dryer manufacturer's recommendations, a booster fan, listed for the purpose, shall be used for lengths up to the booster fan manufacturer's recommendations.

23.110.618.6 Screen size.

Change $\frac{1}{4}$ to $\frac{1}{2}$ in both places.

23.110.618.8 Multi-zone systems.

Add a new section as follows:

618.8 Multi-zone systems. Prior to final inspection, the installer shall measure and record the temperature rise across the heat exchanger under all possible scenarios. The temperature rise shall be within the furnace nameplate rating. At the time of the final inspection, the installer shall submit the test results to the mechanical inspector. Since the inspector may require an additional test in his/her presence to verify the results, the installer shall be present. If the results show the furnace is not operating within its listed parameters under all possible scenarios, the test shall be noted as failed. The installer shall be responsible for correcting any deficiencies and demonstrating proper operation of the furnace.

23.110.621 Unvented room heaters.

Delete section 621 in its entirety.

23.110.623 Cooking appliances.

Add new subsections 623.7 and 623.8 to read as follows:

623.7 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.

623.8 Vertical clearance above cook top. Domestic freestanding or built-in ranges shall have a vertical clearance above the cook top of not less than thirty (30) inches to unprotected combustible material. When the underside of such combustible material is protected with insulating millboard at least one-quarter (1/4) inch thick covered with 0.021-inch-thick (No. 28 U.S. gauge) or a metal ventilating hood, the distance shall not be less than twenty-four (24) inches.

23.110.629.2 Small ceramic kiln ventilation.

Add a new subsection 629.2 to read 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 twelve (12) inches and thirty (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 twelve (12) inches above any portion of a building within four (4) feet and terminate no less than four (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.

23.110.634 Chimney damper opening area.

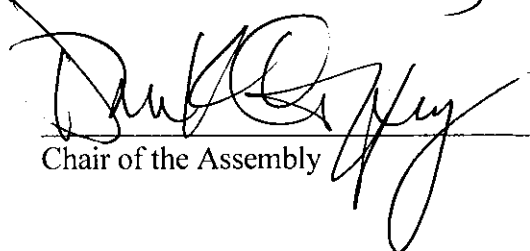
Delete section 634.

23.110. Appendix A Sizing and capacities of gas piping.

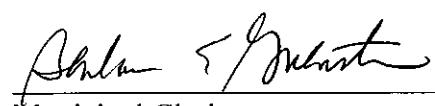
Adopt Appendix A.

Section 2: This ordinance shall become effective January 1, 2008.

PASSED AND APPROVED by the Anchorage Assembly this 29th day of January, 2008.


Chair of the Assembly

ATTEST:


Municipal Clerk

Content Information**Content ID :** 005765**Type:** Ordinance - AOAN ORDINANCE REPEALING AND REENACTING ANCHORAGE
MUNICIPAL CODE TITLE 23 TO ADOPT 2006 AND OTHER RECENT**Title:** EDITIONS, AND ENACTING LOCAL AMENDMENTS OF THE
FOLLOWING CODES: ADMINISTRATIVE; BUILDING; MECHANICAL;
PLUMBING; ELECTRICAL; FIRE; FIRE PROTECTION SERVICE**Author:** maglaquijp**Initiating
Dept:** Dev_Svs**Description:** Local amendments to the 2006 building codes**Date
Prepared:** 11/29/07 11:11 AM**Director
Name:** Ron Thompson**Assembly
Meeting Date:** 12/18/07**Public
Hearing Date:** 1/22/08**Workflow History**

<u>Workflow Name</u>	<u>Action Date</u>	<u>Action</u>	<u>User</u>	<u>Security Group</u>	<u>Content ID</u>
AllOrdinanceWorkflow	11/29/07 11:15 AM	Checkin	gonzalezv	Public	005765
Dev_Svs_SubWorkflow	11/29/07 11:16 AM	Approve	thompsonrj	Public	005765
OMB_SubWorkflow	11/30/07 9:40 AM	Approve	mitsonjl	Public	005765
Legal_SubWorkflow	11/30/07 2:30 PM	Approve	fehlenrl	Public	005765
MuniManager_SubWorkflow	11/30/07 2:37 PM	Checkin	maglaquijp	Public	005765
MuniManager_SubWorkflow	12/7/07 10:08 AM	Approve	maglaquijp	Public	005765
MuniMgrCoord_SubWorkflow	12/7/07 1:28 PM	Approve	abbottmk	Public	005765

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 BUREAU OFFICE

Municipality of Anchorage

ASSEMBLY MEMORANDUM

No. AM 776-2007

Meeting Date: December 18, 2007

FROM: MAYOR

SUBJECT: AN ORDINANCE REPEALING AND REENACTING ANCHORAGE MUNICIPAL CODE TITLE 23 TO ADOPT 2006 AND OTHER RECENT EDITIONS, AND ENACTING LOCAL AMENDMENTS OF THE FOLLOWING CODES: ADMINISTRATIVE; BUILDING; MECHANICAL; PLUMBING; ELECTRICAL; FIRE; FIRE PROTECTION SERVICE OUTSIDE SERVICE AREAS; ENERGY CONSERVATION; EXISTING BUILDINGS; ANCHORAGE DANGEROUS BUILDINGS; SAFETY CODE FOR ELEVATORS AND ESCALATORS; SAFETY STANDARD FOR PLATFORM LIFTS AND STAIRWAY CHAIRLIFTS; RESIDENTIAL; SCHOOL RELOCATABLES; MOBILE AIRCRAFT SHELTERS; GRADING, EXCAVATION AND FILL; AND FUEL GAS.

This ordinance repeals existing editions of the various building codes and their local amendments and adopts new codes and revised local amendments. The new codes and proposed amendments have been reviewed and recommended by the Anchorage Building Board after seven subcommittees comprised of over 95 private sector and MOA professionals reviewed the national codes and made recommendations to the Building Board. This process took approximately six months to complete. All meetings were open to the public. The Building Board held a public hearing on the new codes and proposed local amendments and with no public testimony, the Board unanimously passed these amendments. The State of Alaska has already adopted the 2006 version of the building codes and the administration is forwarding the enclosed document for Assembly approval.

These proposed changes repeal the existing codes and amendments, and adopt the new codes, with local amendments. National codes are changed on a three-year cycle. This ordinance proposes to repeal the 2003 editions of the codes and to adopt the 2006 editions, with the exception of the 2005 edition of the National Electrical Code and the 2004 edition of the Elevator Code. Staff worked in conjunction with the Anchorage Building Board and the Legal Department to insure the easiest and most understandable way to present the new codes and amendments. It was determined that bracketing material to be deleted and underlining changes and new material is too confusing, as the 2006 codes are entirely new codes. Due to length and complexity of building codes, this ordinance is structured in a complete repeal and re-adoption format. Experience has proven this is the least confusing way to adopt the technical building codes.

The technical provisions found throughout the codes and local amendments should not be controversial because every reasonable attempt has been made to resolve technical issues during committee meetings and public hearings.

A Summary of Significant Revisions to the Codes Adopted Under Title 23:

Introduction

Code committees consisting of architects, engineers, designers, contractors, municipal plan reviewers and municipal inspectors met on a regular basis from November 2006 through July 2007 to review the following codes for adoption by the MOA:

- 2006 International Building Code (IBC)
- 2006 International Mechanical Code (IMC)
- 2006 Uniform Plumbing Code (UPC)
- 2006 International Fire Code (IFC)
- 2006 International Energy Conservation Code (IECC)
- 2006 International Existing Buildings Code (IEBC)
- 2006 International Residential Code (IRC)
- 2006 International Fuel Gas Code (IFGC)

All proposed codes are updated versions of the currently adopted 2003 codes, except for the International Energy Conservation Code, which replaces the energy conservation standards adopted under Anchorage Municipal Code (AMC) chapter 23.60.

Each code, including the current local amendments, is reviewed with the intent to amend as necessary to accommodate local climatic and seismic conditions. The goal is keep amendments to an absolute minimum. It should be noted, not all amendments concern climatic or seismic issues; some amendments are required to clarify code requirements.

The following summary describes only the significant revisions and is not intended to be a complete list of all revisions. We consider a significant revision as a change that will impact design or construction, a change in a life/safety requirement or a change that may result in increased or decreased construction cost. The summary includes both revisions to the national codes as well as revisions to local amendments. Detailed information on all changes to the national codes is available in publications by the International Code Council (ICC).

Chapter 23.15 International Building Code

Revisions to the IBC:

In general, most revisions to the IBC are basically clarifications and/or refinements of existing requirements. The net effect may result in either the loosening or tightening of code provisions. In some cases building costs will be slightly reduced and in others slightly increased. We anticipate that the net effect will be no significant increase in cost. In order to produce a useful document that is not hundreds of pages long, these revisions have been omitted from this discussion. Changes to the IBC generally apply to new construction only and do not apply to renovations of existing buildings. Please consider the following significant revisions:

Section 707.14.1

Elevator lobbies are now required in all high rise buildings. An elevator lobby is a barrier intended to reduce or eliminate the spread of smoke from the fire floor to other floors. An

1 additional set of smoke doors may be used in lieu of the elevator lobby. This is an obvious life
2 safety issue. This change will increase cost of construction of a high rise building.

3
4 Section 707.14.2

5 In lieu of an elevator lobby, a mechanical system may be used to pressurize the elevator
6 hoistway to keep the smoke out. The code contains specific requirements for the pressurization
7 system. The use of a mechanical pressurization system in lieu of a lobby is purely the designer's
8 option.

9
10 Section 716.5.3

11 In multi-story group R occupancies such as apartment buildings and hotels, smoke dampers are
12 no longer required to protect shaft wall duct penetrations when certain minimum conditions are
13 met. The issue here is the potential spread of smoke from floor to floor. Traditionally, this had
14 only been allowed in group B business occupancies and was not allowed in group R occupancies
15 where people may be sleeping and consequently unaware of their surroundings. This change
16 will simplify design and construction and reduce cost.

17
18 Section 903.2.1.2

19 The occupant load threshold at which a group A-2 occupancy (such as restaurants, bars,
20 nightclubs, etc.) must be provided with an automatic sprinkler system has been reduced from 300
21 to 100 people. Since the occupant load is based on an occupant load factor of 15 square feet per
22 person for areas with tables and chairs, the effective area threshold has reduced from 4500 square
23 feet to 1500 square feet. This will have a cost impact on restaurants and bars with an occupant
24 load between 100 and 299 people that initially did not intend to install a sprinkler system. It
25 should be noted that this is a change in the IFC that is reprinted in the IBC for convenience.

26
27 Sections 1007.3, 1007.4, 1007.6.2

28 Where an enclosed exit stairway or elevator is used as a portion of an accessible means of egress,
29 an area of refuge or a horizontal exit is now required to access such a stairway or elevator in
30 sprinklered buildings. This will affect nearly all sprinklered commercial buildings, three or more
31 stories in height, and will add complexity and cost. In the past, if the building had a fire
32 sprinkler system, this was not required. It has been determined on a national level that the
33 sprinkler trade-off is not justified for mobility-impaired people.

34
35 Section 1008.1.1

36 Interior passage doors in group R-1 occupancies (such as hotels and motels) now require a
37 minimum opening clear width of 32 inches to accommodate mobility-impaired people.

38
39 Sections 1009.11.2, 1013.5, 1013.6

40 A 42 inch high guard is now required where a roof hatch opening is located within 10 feet of the
41 roof edge. This is now consistent with the IMC.

42
43 Section 1013.3

44 In individual dwelling units, the maximum permitted opening between intermediate rails in
45 required guards along open sides of stairs has been increased such that a 4 and 3/8 inch diameter

sphere cannot pass through. The previous dimension was 4 inches. This was done to allow the placement of only two balusters at each stair. This creates flexibility and reduces construction cost.

Section 1405.12.2

A new code provision regulating operable windows in dwellings mandates a minimum height of 24 inches from the finished floor to the clear opening of the window where the distance between such opening height and the grade below exceeds 6 feet. The intent of this new provision is to reduce the number of children falling out of windows. No cost change.

Section 3002.4

Elevators in buildings four or more stories in height must be able to accommodate a 24 inch by 84 inch stretcher. This is a size increase from the previous requirement to accommodate a 24 by 76 inch stretcher. In some instances, this will require slightly larger elevator cars.

Section 3104.11

The requirement for smoke/heat vents in pedestrian walkways has been deleted because this was deemed as an antiquated and unnecessary requirement. This will result in a cost reduction in buildings with pedestrian walkways.

Section 3109.5

The requirements for swimming pool and spa drains have been revised to reduce the possibility of entrapment.

Revisions to the local amendments:

Section 23.15.1503

This local amendment, which originally required that only exits be protected from falling snow and ice, was expanded to address a serious life safety concern elsewhere in the vicinity of a structure. These areas include 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 electric meters, services and disconnects. Additional language was added to require that buildings be designed and constructed to minimize a hazardous accumulation of snow and ice on downward sloped eaves, roof surfaces and architectural projections. The language is intentionally performance based in nature to allow design flexibility. This amendment applies to new construction only. A similar amendment to the International Fire Code applies to existing buildings. Given the obvious nature of local climatic conditions, it is not acceptable that anyone be injured or killed from falling snow and ice.

Chapter 23.20 International Mechanical Code

Revisions to the IMC:

Section 506.3.4

Revised to reduce the exhaust air velocity in a grease duct serving a Type I hood from 1500 feet per minute to 500 feet per minute. This should reduce electrical operating costs and reduce kitchen noise levels.

Revisions to the local amendments:

No significant changes.

Chapter 23.25 Uniform Plumbing Code

Revisions to the UPC:

Chapter 10 – Traps and Interceptors

There have been several changes to this chapter in reference to grease removal systems for eating establishments and other facilities that produce grease laden waste. The focus on the changes is recognizing new technology for the removal of grease.

Revisions to local amendments:

Section 23.25.100 – Local amendments to the Uniform Plumbing Code, 2006 Edition

The deletion of Chapter 12 (Gas Piping) and Chapter 15 (Firestop Protection) of the code was reinstated to have parity with the State of Alaska requirements.

Chapter 23.45 International Fire Code

In general, most revisions to the IFC are basically clarifications and or refinements of existing requirements. The net effect may result in either the loosening or tightening of code provisions. In some cases building costs will be slightly reduced and in others slightly increased, resulting in no significant net increase. In order to produce a useful document that is not hundreds of pages long, these revisions have been omitted from this discussion. Please consider the following significant revisions:

Revisions to the IFC:

Chapter 9 Fire Protection Systems:

Revised Subsection 903.2.1.2 Group A: reduced the number from 300 to 100 occupants where automatic sprinkler system shall be required. See commentary to the IBC.

Revisions to the local amendments:

23.45.105.6 adopted additional operational permits for compressed gases; exhibits and trade shows; explosives; hazardous materials; high-pile storage area exceeding 500 square feet; liquid- or gas-fueled vehicles or equipment in assembly buildings; storage and use of LP-gas and cargo tankers that transport LP-gas; open fire or a fire on any public street, alley, road, or other public or private ground; removal from service, use or operation of private fire hydrants; to install, maintain, and continue use of gates and restricted access egress on fire department access roads.

23.45.903.5.3 Hydraulic calculations. Requires 15% safety factor for flow at the supply be included in the hydraulic calculations for sprinkler systems.

23.45.Appendix D section D104.1 was amended to require two (not three) means of fire apparatus access for buildings exceeding three stories or 30 feet in height.

Chapter 23.60 International Energy Conservation Code

Revisions to the IECC:

This is the first proposed adoption of the International Energy Conservation Code. The current adopted energy code consists of several out-of-date American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) Standards. The reasons to adopt the IECC are as follows:

1. The IECC is part of the International family of codes and is coordinated with the IBC, IEBC, IRC, IMC, IFGC, etc.
2. The state of Alaska through AHFC has adopted the IECC as applicable to residential construction.
3. To update the municipality's out-of-date energy conservation code.

The energy code is broken down into two major segments – residential and commercial. Application of the residential requirements to one- and two-family dwellings and townhouses is purely voluntary due to local amendments to the IECC and IRC that create a prescriptive table that may be used in lieu of the code requirements. Since this is the same table that was in the 2003 IRC, the residential energy conservation requirements have not changed. It should be noted that this prescriptive table is slightly less restrictive than the requirements in the IECC.

The commercial requirements in the IECC (as they pertain to new construction) are similar to those in ASHRAE Standard 90.1-1989, which serves as the current energy code for the MOA. The IECC also allows compliance with the current (2004) version of ASHRAE Standard 90.1 as an alternative to compliance with the IECC. Since the IECC is a new code, the committee chose to amend or delete many of the mechanical and electrical requirements for alterations to existing buildings to reduce their cost impact and make the code more palatable for the community.

The most significant impact of adopting the IECC is that now the community will have ready access to the adopted energy code. The MOA Development Services Department will sell the IECC along with all of the other adopted codes. The Development Services Department has never sold the ASHRAE Standards. Additionally, the IECC is written in a codified language that is easier to use than the ASHRAE Standards. Given the proposed local amendments, the overall cost impact on the community should be negligible.

Chapter 23.65 International Existing Building Code

The intent of the IEBC is to address existing buildings that do not comply with the current adopted version of the IBC. The IEBC may be applied to any repair or alteration to an existing building. If the existing building complies with the IBC, the IEBC need not be applied. As a minimum, the repair or alteration to an existing building must comply with the IEBC.

Revisions to the IEBC:

Section 804.2.1

When required by the IBC for new construction, a manual fire alarm system must now be installed throughout the work area of a level 3 alteration. Level 3 alterations by definition involve more than 50 percent of the total building area.

Section 804.2.2

When required by the IBC for new construction, an automatic fire detection system must now be installed throughout the work area of a level 3 alteration.

Section 912.2.1

Where a change of occupancy classification occurs that requires an automatic fire sprinkler system be provided based on the new occupancy classification in accordance with the IBC, such system is now required throughout the area where the change of occupancy occurs. This requirement fills a hole in the 2003 IEBC where someone could construct a building without a fire sprinkler system, then once the building is complete, change the occupancy classification to a higher hazard that requires a sprinkler system and not have to install the sprinkler system.

Section 912.2.2

Where a change of occupancy classification occurs that requires a fire alarm and detection system be provided based on the new occupancy classification in accordance with the IBC, such system is now required throughout the area where the change of occupancy occurs. This requirement also fills a hole in the 2003 IEBC.

Section 912.3

In areas of a building undergoing a change of occupancy classification, the interior wall, floor and ceiling finish materials must now comply with the requirements in the IBC for the new occupancy classification. This requirement also fills a hole in the 2003 IEBC.

Section 912.5.1

A change of occupancy classification to an educational (group E) occupancy must now comply with the area limitations in the IBC, just like any other change in occupancy classification where the change is from a lower to higher hazard classification.

Revisions to the local amendments:

The structural provisions for the work area compliance method outlined in chapters 6 through 9 have been deleted because the requirements are confusing and contradictory. The prescriptive structural provisions in chapter 3 may be applied to all renovations that do not comply with the IBC. Additionally, in order to simplify the structural provisions and be consistent, the allowable force increase in existing structural elements was increased from 5 percent to 10 percent throughout the code.

Chapter 23.85 International Residential Code

Revisions to the IRC:

In general, most revisions to the 2006 IRC are basically clarifications and or refinements of existing requirements. A few additions were noted. The major changes came from refining the requirements in the hurricane regions, which will not affect us. The net effect resulted in staying status quo in most of the code revisions that do affect us with only a few additions. Please see the following significant revisions to the 2006 IRC:

Table R301.5 – Attics with limited storage

This is a new item in the table that the truss manufacturers are going to have to pay attention too. Whether the owner/builder is wanting the limited storage space or not, the code requires that any truss were there is a maximum clear height between joist and rafter greater than 42 inches; or were there are two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high by 24 inches wide or greater, located within the plane of the truss, will need to have the bottom chord of the truss designed for a 20 psf live load instead of the 0 psf normally used. The two major truss manufacturers for this area have been notified about this change.

Section R613.2 – Window sills

Provisions have been added for window sill height and protection from fall from exterior operable windows when such windows are more than 72 inches above exterior finished grade and whose bottom edge is less than 24" off the interior floor surface. The windows that fall into this category are required to be fixed or when opened, not to allow a 4" sphere to pass through or a guard needs to be installed. The intent is to reduce the number of falls through exterior windows by small children.

Section R703.2 and Table R703.4– Water-resistive barrier

Water-resistive barriers (like Tyvek) have not historically been required by the MOA or by the code under exterior coverings on the outside surface of the exterior walls (example - horizontal lap siding). The 2006 code requires that there be water-resistive barrier under all products used as a cover for the exterior surface of the exterior walls including T1-11. This is a significant code change. Due to increased cost, the IRC code committee did not want to mandate that a water-resistive barrier be installed under all siding so they created a local amendment (see 23.85R703.2) to not require the barrier. It should be noted that most siding manufacturers require a water resistive barrier under their product. Due to the local amendment, the MOA will not enforce this requirement.

Revisions to the local amendments:

In general, most revisions in the local amendments to the 2006 IRC are clarifications from situations that have come up in the field during construction or within the design community. The net effect resulted in staying status quo in most of the code revisions. In some cases building costs will be slightly reduced and in others slightly increased, resulting in no significant net change. Please consider the following significant revisions to the 2006 IRC local amendments:

Sections 23.85.R317.2.1, R317.2.1.1, R317.2.1.1.1, R317.2.1.1.2, R317.2.4 – Townhouse separation requirements

These provisions were added to clarify the construction requirements for the fire separation walls between townhouses. The IRC isn't clear, therefore field complications resulted. Our hope is to eliminate misunderstandings before construction and consequently save the builder money.

Chapter 23.110 International Fuel Gas Code

No significant changes.

The following community members served on the code review committees:

2006 CODE REVIEW COMMITTEES

UPC:

Michael Cooke, Chair	Partusch Plumbing
Bob Holben	ASD
Dave Boggs	AMC Engineers
Dewey Jarrett	Superior Plumbing
Gary Hile	MOA
Jeff Cooper	Central Plumbing
Marilyn Honeysett	MOA
Michelle Gifford	MOA
Mike Divens	PDC Eng
Roger Heikes	State of AK D.O.L.
Steve Miller	Local 367
Steve Schroeder	Mech. Construction
Tracy McKeon	RSA

IRC:

Paul Michelsohn, Chair	Michelsohn & Daughter
Becky Hellman	MOA
Bob Lutje	Timberline Homes
Collin Dey	ASCG
Don Hickel	MOA
Ed Kamienski	Coffman Engineers
Jim Stubbs	MOA
John Rankin	John Rankin
Karen Cushman	Interlocken
Shawn Broiles	3d Drafting
Martha Lee	Blind Monkey
Ron Wilde	MOA

IMC/IFGC:

Craig Fredeen, Chair	PDC Engineers
Bob Holben	ASD
Bob Whealy	CH2M
David Butto	Enstar
Dewaine Collins	MOA
Gary Hile	MOA
Jim Gadomski	MOA
Larry Kampen	HK Sheetmetal
Leigh Bergstrom	MOA
Mak Kampen	HK Sheetmetal
Mark Langberg	AMC Engineers
Mike Fowler	Alaska Sheetmetal
Steve Miller	Local 367
Mack Bergstedt	RSA

Energy:

Calvin Hay	HZA Engineers
Ed Kamienski	AMC Engineers
Geoff Feiler	Heat Loss Analysis, Inc.
Jessica Malecha	AMC Engineers
John Crittenden	Architects Alaska
John McCool	McCool Carlson Green
Kevin Hunter	Megawatt Electric
Noffsinger, Ross D.	MOA
Pat Budke	Neeser, Inc.

Randall Williams	AMC Engineers
Tom Zietlow	HZA Engineers
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IFC:	
Jon Steele, Chair	ECI/Hyer
Bob Holben	ASD
Dave Boggs	AMC Engineers
Dave Paule	Criterion
Henry Kim	VECO
Jeff Wilcheck	Chinook Fire Protection
John Peck	AFD
Ken Buettner	Yukon Fire
Mark Frischkorn	RSA Engineering
Martin Schwan	AFD
Nick Bakic	Accel Fire Systems
Pat Thompson	Simplex Grinnell
Ross Fosberg	Ross Fosberg Fire Protection
Sean Carlson	ECI/Hyer
Skipp Bringmann	Alcan Electric
Tim Janneck	PDC Engineering
Tom Beebe	Fire Services of AK
Frank Carpenter	AFD
John Peck	AFD
Jim Luke	GMW
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IBC Structural:	
Collin Dey, Chair	ASCG
Colin Maynard	BBFM
Bill Westbrook	Bill Westbrook
Bob Holben	ASD
Brad Gilgus	MOA
David Stehyrba	Enterprise Engineering
Matt Hood	Reid Middleton
Nelson Franklin	Nelson Franklin
Ron Wilde	MOA
Scott Gruhn	BBFM
Troy Feller	BBFM Engineers
Wayne Bolen	MOA
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IBC Non-Structural and IEBC:	
Dave Paule, Chair	Criterion General
Bob Holben	ASD
Frank Carpenter	MOA
Gordon Thompson	Architect
Henry Kim	VECO
Hildi Cain	ASCG
Jeff Koonce	Koonce Pfeffer Architects
Jim Stubbs	MOA
Jon Steele	ECI/Hyer
Phillip Calhoun	MOA
Ross Fosberg	Ross Fosberg Fire Protection
Ross Noffsinger	MOA
Scott Bohne	Rim Architects
Sean Carlson	ECI/Hyer

1 Development Services and 2006 review committees recommend this ordinance be approved by the
2 Assembly. All issues contained in the technical building codes portion of this document have been
3 addressed in detail by committees established by the Building Board, through advertised and posted
4 public hearings before the separate committees, and by the Building Board as a whole.
5

6 **THE ADMINISTRATION RECOMMENDS APPROVAL OF AN ORDINANCE REPEALING**
7 **AND REENACTING ANCHORAGE MUNICIPAL CODE TITLE 23 TO ADOPT 2006**
8 **AND OTHER RECENT EDITIONS, AND ENACTING LOCAL AMENDMENTS OF**
9 **THE FOLLOWING CODES: ADMINISTRATIVE; BUILDING; MECHANICAL;**
10 **PLUMBING; ELECTRICAL; FIRE; FIRE PROTECTION SERVICE OUTSIDE**
11 **SERVICE AREAS; ENERGY CONSERVATION; EXISTING BUILDINGS;**
12 **ANCHORAGE DANGEROUS BUILDINGS; SAFETY CODE FOR ELEVATORS AND**
13 **ESCALATORS; SAFETY STANDARD FOR PLATFORM LIFTS AND STAIRWAY**
14 **CHAIRLIFTS; RESIDENTIAL; SCHOOL RELOCATABLES; MOBILE AIRCRAFT**
15 **SHELTERS; GRADING, EXCAVATION AND FILL; AND FUEL GAS.**
16
17

18 Prepared by:	Department of Development Services
19 Approved by:	Ron Thompson, Director
20	Department of Development Services
21 Concur:	James N. Reeves, Municipal Attorney
22 Concur:	Denis LeBlanc, Municipal Manager
23 Respectfully submitted,	Mark Begich, Mayor
24	

MUNICIPALITY OF ANCHORAGE
Summary of Economic Effects -- General Government

AO Number: 2007- 174

Title: AN ORDINANCE REPEALING AND REENACTING ANCHORAGE
MUNICIPAL CODE TITLE 23 TO ADOPT 2006 AND OTHER RECENT
EDITIONS, AND ENACTING LOCAL AMENDMENTS OF THE FOLLOWING
CODES: ADMINISTRATIVE; BUILDING; MECHANICAL; PLUMBING;
ELECTRICAL; FIRE; FIRE PROTECTION SERVICE OUTSIDE SERVICE

Sponsor:

Preparing Agency: DEPARTMENT OF DEVELOPMENT SERVICES

Others Impacted: SAME

CHANGES IN EXPENDITURES AND REVENUES:

(In Thousands of Dollars)

	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>
Operating Expenditures					
1000 Personal Services					
2000 Non-Labor					
3900 Contributions					
4000 Debt Service					
TOTAL DIRECT COSTS:	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Add: 6000 Charges from Others					
Less: 7000 Charges to Others					
FUNCTION COST:	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
REVENUES:	<u>0</u>				
CAPITAL:	<u>0</u>				
POSITIONS: FT/PT and Temp	<u>0</u>				

PUBLIC SECTOR ECONOMIC EFFECTS:

The adoption of the 2006 editions of the new codes may have a positive economic savings in total building cost to the public sector for any building built with tax dollars. We do not think the codes will increase the cost of development.

PRIVATE SECTOR ECONOMIC EFFECTS:

The adoption of the 2006 editions of the new codes may have an overall savings in total building cost to the private sector. There could be fines assessed if work is not done to the adopted codes, but that is based upon the individual contractors doing the work incorrectly. Otherwise, there is no economic effect estimated.

Prepared by: Ron Thompson
Director, Development Services Department

Telephone: 343-8307

Validated by OMB: _____

Date: _____

Approved by: _____
(Director, Preparing Agency)

Date: _____

Concurred by: _____
(Director, Impacted Agency)

Date: _____

Approved by: _____
(Municipal Manager)

Date: _____