

Alaska

13 AAC 50.020. Building code

The *International Building Code (I.B.C.)*, Chapters 1 - 12, 14 - 28, and 30 - 35, and Appendix C (2006 Edition) are adopted by reference to regulate all occupancies and buildings with the following revisions:

- (1) Chapter 1 of the *I.B.C.* is revised by deleting Sections 101.4.5, 101.4.7, 103, 104.4, 104.6, 104.8, 105.4, 106.5, 108.2, 108.4, 108.5, and 109 - 115;
- (2) Chapter 1, Section 101.2 (Scope) of the *I.B.C.*, the last sentence of the exception is revised by adding "as governed by the provisions of AS 18.70.080";
- (3) Chapter 1, Section 101.4.1 (Electrical) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";
- (4) Chapter 1, Section 101.4.4 (Plumbing) of the *I.B.C.*, is revised by deleting the reference to the "*International Plumbing Code*" and replacing it with "Plumbing Code as adopted by 8 AAC 63.010, as amended as of December 6, 2003 and as amended from time to time";
- (5) Chapter 1, Section 102.6 (Existing structures) of the *I.B.C.*, is revised by deleting the reference to the "*International Property Maintenance Code*";
- (6) Chapter 1, Section 104.2 (Applications and permits) of the *I.B.C.*, is revised by deleting the words "and permits" from the heading, and the section is revised to read: "The building official shall receive applications and review construction documents for the erection, alteration, demolition, and moving of buildings and structures and, at the agency's discretion, will inspect the premises to enforce compliance with the provisions of this code.";
- (7) Chapter 1, Section 105 (Permits) of the *I.B.C.*, is revised by deleting the title and replacing it with "Application for Plan Review";
- (8) Chapter 1, Section 105 (Permits) of the *I.B.C.*, is revised by replacing the word "permit" wherever it occurs with the words "plan review";
- (9) Chapter 1, Section 105.2 (Work exempt from permit) of the *I.B.C.*, is revised by deleting items 2, 4, and 5 and, adding a new item 14 to read: "14. Buildings classified as a Group U Occupancy, other than those in Appendix L, that are not offered for use by persons other than the property owner or the owner's employees, not open to the public, and not containing hazardous materials in excess of those found in Tables 307.7(1) and 307.7(2). This exemption includes buildings in which the public has no access, such as farm, dairy operations, or greenhouse operations.";
- (10) Chapter 1, Section 105.3 (Application for permit) of the *I.B.C.*, the first sentence is revised to read: "To obtain a plan review approval, the applicant must first file an application in writing on a form furnished for that purpose by the code enforcement agency.";

(11) Chapter 1, Section 106 (Construction Documents) of the *I.B.C.*, is revised by replacing the word "permit" wherever it occurs, with the words "plan review";

(12) Chapter 1, Section 106.1.1.1 (Fire protection system shop drawings) of the *I.B.C.*, is revised by adding the sentence "A copy of the approved stamped plans are to be retained on site." at the end of the section;

(13) Chapter 1, Section 106.3.1 (Approval of construction documents) of the *I.B.C.*, is revised to read: "One set of bound construction documents so reviewed shall be retained by the building official.";

(14) Chapter 1, Section 106.3.4.1 (General) of the *I.B.C.* , the first sentence of the third paragraph is revised to read: "Structural observation shall be as required by Section 1709.";

(15) Chapter 1, Section 107.3 (Temporary power) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(16) Chapter 1, Section 108.1 (Payment of fees) of the *I.B.C.*, is revised by replacing the word "permit" wherever it occurs, with the words "plan review";

(17) Chapter 1, Section 108.3 (Building permit valuations) of the *I.B.C.*, is revised to read: "Building plan review valuations. The applicant for a plan review involving an addition to an existing structure or a remodel of an existing structure shall provide an estimated building construction value at the time of application. The valuation shall include the total value of work, including materials and labor for which the plan review is being issued. The total value of work must include the electrical, gas, mechanical, and plumbing equipment and permanent systems, including fire protection systems. If, in the opinion of the building official, the valuation is underestimated on the application, the building official shall deny the plan review, unless the applicant can show detailed estimates that meet the approval of the building official. The building official shall set the final building construction valuation.

The valuation for all new construction not involving remodel work or additions to existing structures must be based on the Valuation Schedule established in 13 AAC 50.027.";

(18) Chapter 2, Section 201.3 (Terms defined in other codes) of the *I.B.C.*, is revised by deleting the reference to the "*International Plumbing Code*";

(19) Chapter 2, Section 202 (Definitions) of the *I.B.C.*, is revised by adding a definition to read: "BUILDING, EXISTING, is a building that

(A) was erected before December 5, 1956; or

(B) was erected before the adoption of the *2006 International Building Code*, *2006 International Fire Code*, *2006 International Mechanical Code*, and the *2006 International Fuel Gas Code*, and complies with the building code regulations in effect at the time of construction.";

(20) Chapter 3, Section 305.2 (Day care) of the *I.B.C.*, is revised to read: "The use of a building or structure, or portion thereof, for educational, supervision, or personal care services for more than five children older than two and one-half years of age, including children related to the staff, shall be classified as a Group E occupancy.";

(21) Chapter 3, Section 305.2 (Day care) of the *I.B.C.*, is revised by adding a new exception to read:

"Exception: Family child care homes (Group R-3) operating between the hours of 6:00 a.m. and 10:00 p.m. may accommodate a total of 12 children of any age without conforming to the requirements of this regulation (Group E occupancy), except for smoke detectors and alarms as described in Section 907.2.10, carbon monoxide detectors and alarms as specified in Section 422, means of egress requirements of Section 1003, including emergency escape and rescue openings, as required by Section 1026, in napping or sleeping rooms, and fire extinguisher requirements as described in the *International Fire Code*.";

(22) Chapter 3, Section 308.2 (Group I-1) of the *I.B.C.*, is revised by adding a new paragraph between the first and second paragraphs to read: "Facilities within this occupancy classification that have occupants needing physical assistance to respond in emergency situations must comply with Section 423.";

(23) Chapter 3, Section 308.3 (Group I-2) of the *I.B.C.*, is revised by changing the last sentence to read: "A facility such as the above with five or fewer persons, including persons related to the staff, shall be classified as a Group R-3.";

(24) Chapter 3, Section 308.3.1 (Child care facility) of the *I.B.C.*, is revised to read: "A child care facility that provides care on a 24-hour basis to more than five children of two and one-half years of age or less, including children related to the staff, shall be classified as Group I-2.";

(25) Chapter 3, Section 308.5 (Group I-4, day care facilities) of the *I.B.C.*, is revised by changing the second sentence to read: "A facility such as the above with five or fewer persons, including persons related to the staff, shall be classified as a Group R-3.";

(26) Chapter 3, Section 310.1 (Residential Group R) of the *I.B.C.*, is revised by adding a new paragraph between the first and second paragraphs to read: "For facilities within this occupancy classification that have occupants needing physical assistance to respond in emergency situations, see Section 419.";

(27) Chapter 4, Section 406.1.4 (Separation) of the *I.B.C.*, paragraph 1 is revised by deleting "1/2 inch (12.7 mm) gypsum board" and replacing it with "5/8 inch (15.88 mm) Type X gypsum board";

(28) Chapter 4, Section 412.2.1 (Exterior walls) of the *I.B.C.*, is revised by deleting "30 feet (9 144 mm)" and replacing it with "20 feet (6,098 mm)";

(29) Chapter 4, Section 415.6.4 (Dry cleaning plants) of the *I.B.C.*, is revised by deleting the reference to the "*International Plumbing Code*" and replacing it with "Plumbing Code as adopted by 8 AAC 63.010, as amended as of December 6, 2003 and as amended from time to time";

(30) Chapter 4 (Special Detailed Requirements Based on Use and Occupancy) of the *I.B.C.*, is revised by adding new Section 421 (Special Security Requirements for Elevated Buildings), Section 422 (Carbon Monoxide Detectors and Alarms), and Section 423 (Occupants Needing Special Assistance) (Group I-1 and R-4) to read:

SECTION 421
SPECIAL SECURITY REQUIREMENTS FOR ELEVATED BUILDINGS

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

Exceptions:

1. Normally unoccupied buildings;
2. Buildings with F, H, S, and U occupancies.

SECTION 422 CARBON MONOXIDE DETECTORS AND ALARMS

422.1 (Carbon Monoxide Detectors and Alarms) The provisions of this section shall apply to Groups I-1, I-2, and all R occupancies. At least one carbon monoxide detector or alarm shall be installed on each floor level. If a floor level contains bedrooms or sleeping rooms, at least one detector shall be located in the immediate vicinity of the sleeping area, outside of the bedrooms or sleeping rooms. Carbon monoxide detectors and alarms shall be installed in accordance with their listing. The alarm shall be clearly audible in all sleeping rooms, even if the intervening doors are closed.

Exceptions:

1. Carbon monoxide detectors and alarms are not required in dwelling units and structures that have no combustion appliances, attached garage, or other vehicle parking within 25 feet of any direct opening.
2. Carbon monoxide detectors and alarms are not required in dwelling units and structures that have only direct vent combustion appliances, and no attached garage, or other vehicle parking within 25 feet of any direct opening.
3. Carbon monoxide detectors and alarms are not required if 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 and enclosed parking garage, the garage shall be ventilated by an approved automatic carbon monoxide exhaust system designed in accordance with the 2006 *I.M.C.*

422.2 Interconnection. In new construction, all carbon monoxide detectors and alarms 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 and alarms shall receive their primary power from the building wiring if the wiring is served from a commercial source, and shall be equipped with a battery backup. Wiring shall be permanent and without a disconnecting switch other than what is required for overcurrent protection. In existing construction, carbon monoxide detectors and alarms may be powered by battery or a cord-and-plug with battery backup.

SECTION 423 OCCUPANTS NEEDING PHYSICAL ASSISTANCE

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

423.2 Definitions. In this section

"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 that (a) is exterior to and away from a building; or (b) is within a building of any type construction protected throughout by an approved automatic sprinkler system and that is either (1) within an exit enclosure meeting the requirements of Section 1020; or (2) within another portion of the building that is separated by smoke partitions meeting the requirements of Section 710, with not less than a one-half hour fire resistance rating, and the portion of the building has access to a means of escape or exit that conforms to the requirements of this code and does not require return to the area of the fire."

423.3 Fire Drills And Evacuation Capability Determination. The initial determination of evacuation capability will be determined by a fire drill conducted by a fire code official or by an employee of the Department of Health and Social Services responsible for licensing the facility. Changes to the evacuation capability will be made by a fire code official, based on a record of fire drills conducted by the facility staff. The drills will be conducted six times a year on a bimonthly basis, with at least two drills conducted during the night when residents are sleeping. Records must indicate the time taken to reach a point of safety, date and time of the drill, location of simulated fire origin, escape paths used, and comments relating to residents who resisted or failed to participate in the drills.

423.4 Evacuation Capability and Fire Protection Requirements. Fire protection requirements of a facility under this section are as follows:

423.4.1 Prompt Evacuation Capability. Evacuation capability of three minutes or less indicates prompt evacuation capability. In facilities maintaining prompt evacuation capability, the requirements of the code for Groups I-1 or R-4 occupancies must be followed.

423.4.2 Slow Evacuation Capability. Evacuation capability of more than three but less than 14 minutes indicates slow evacuation capability. In facilities maintaining slow evacuation capability, the facility must be protected by (a) an automatic smoke detection system, using addressable smoke detectors, designed and installed in accordance with the provisions of this code and N.F.P.A. 72-2007; and (b) an automatic sprinkler system, with quick-response or residential sprinklers, installed in accordance with section 903.3.1.2 (N.F.P.A. 13R-2007 (Sprinkler Systems)) or 903.3.1.3 (N.F.P.A . 13D-2007 (Sprinkler Systems)).

423.4.3 Impractical Evacuation Capability. Evacuation capability of 14 minutes or more indicates impractical evacuation capability. In facilities maintaining impractical evacuation capability, the facility must be protected by (a) the protections for a facility with slow evacuation capability under Section 423.4.2; (b) one-half hour fire-resistive construction throughout the facility; and (c) direct egress from sleeping rooms for occupants needing evacuation assistance either (i) to the exterior at grade level, to an exterior porch or landing via a 3 feet 60 inches wide door; or (ii) if the sleeping rooms are separated from the rest of the building by smoke partitions installed in accordance with Section 710, by egress windows conforming to the provisions of Section 1026.

(31) Chapter 5, (General Building Heights And Areas) of the *I.B.C.*, is revised by adding a new Section 501.3 to read: "501.3 Location on property. Buildings must adjoin or have access to a permanent public way or yard on not less than one side. Required yards by this section must be permanently maintained.";

(32) Chapter 5, Section 504 (Height) of the *I.B.C.*, is revised by adding a new Section 504.4 to read: "504.4 Day care facilities. Facilities that are operated in a primary residence (Group R-3) between the hours of 6:00 a.m. and 10:00 p.m., and accommodating up to a total of 12 children of any age may use the second story of the building without providing an automatic sprinkler system, or complying with Table 302.3.2, Table 602, and the Type VA requirements set out in Table 503, if all other applicable legal provisions for a Group E Occupancy are met.";

(33) Chapter 5, Table 508.2 (Incidental Use Areas) of the *I.B.C.*, is revised by changing the wording in the first block under the left column to read: "Furnace rooms in Group E, I, 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";

(34) Chapter 7, Section 717.4.2 (Groups R-1 and R-2) of the *I.B.C.*, is revised to read: "Draftstopping must be provided in attics, mansards, overhangs, or other concealed roof spaces of Group R-2 buildings with three or more dwelling units and in all Group R-1 buildings. The intervening space between any two draftstops or walls must be designed for adequate cross ventilation as described in Section 1203.2. Draftstopping must be installed above, and in line with, tenant and dwelling separation walls that do not extend to the underside of the roof sheathing above.";

(35) Chapter 7, Section 717.4.2 (Groups R-1 and R-2) Exception 3 of the *I.B.C.*, is revised to read: "Draftstopping in attic spaces of Groups R-1 and R-2 occupancies that do not exceed four stories in height may be installed so that the area between draftstops that extends from the ceiling to the roof does not exceed 3,000 square feet, and the greatest horizontal dimension does not exceed 60 feet. The draftstops do not have to be located directly above or in line with walls separating tenant spaces, unless part of construction required by other provisions of this code. Adequate cross ventilation must be provided in accordance with Section 1203.2.";

(36) Chapter 8, Section 806.1 (General requirements) of the *I.B.C.*, is revised by adding "or treated by a method approved by the fire code official." at the end of the fourth paragraph;

(37) Chapter 9, Section 903.2.2 (Group E) of the *I.B.C.*, is revised to read: "Group E. An automatic sprinkler system must be provided throughout all buildings with Group E occupancies. An automatic sprinkler system must also be provided for every portion of educational buildings below the level of exit discharge.

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

Day care uses that are licensed to care for more than five persons between the hours of 10:00 p.m. and 6:00 a.m. must be equipped with an automatic sprinkler system designed and installed as described in Section 903.3.1.3 or an equivalent system approved by the building official.";

(38) Chapter 9, Section 903.2.7 (Group R) of the *I.B.C.*, is revised to read: "Group R. An automatic sprinkler system must be installed in Group R occupancies as required in 903.2.7.1 through 903.2.7.3";

(39) Chapter 9 of the *I.B.C.* is revised by adding a new Section 903.2.7.1 to read: "903.2.7.1 Group R-1. An automatic sprinkler system or a residential sprinkler system installed in accordance with Section 903.3.1.2 must be provided throughout all buildings with a Group R-1 fire area";

(40) Chapter 9 of the *I.B.C.* is revised by adding a new Section 903.2.7.2 to read: "903.2.7.2 Group R-2. An automatic sprinkler system or a residential sprinkler system installed in accordance with Section

903.3.1.2 must be provided throughout all buildings with a Group R-2 fire area that are more than two stories in height, including basements, or that have more than sixteen dwelling units or sleep rooms.";

(41) Chapter 9 of the *I.B.C.* is revised by adding a new Section 903.2.7.3 to read: "903.2.7.3 Group R-4. An automatic sprinkler system or a residential sprinkler system installed in accordance with Section 903.3.1.2 must be provided throughout all buildings with a Group R-4 fire area";

(42) Chapter 9, Section 903.3.1.1 of the *I.B.C.*, is revised by adding a new Section 903.3.1.1.2 to read: "903.3.1.1.2 Elevator Hoist Ways and Machine Rooms. When the provisions of this code require the installation of automatic sprinkler systems, the installation in elevator hoist ways and machine rooms must occur as described in *N.F.P.A.* 13-2007, (Elevator hoist ways and machine rooms) and adopted by reference, and the American Society for Mechanical Engineers (A.S.M.E.) A17.1 *Safety Code for Elevators and Escalators* as adopted by 8 AAC 77.005, as amended as of June 14, 2006 and as amended from time to time";

Exception: Sprinklers are not required in an elevator machine room where the machine room is:

- (1) separated from the remainder of the building as described in *I.B.C.* Section 3006.4;
 - (2) smoke detection is provided in accordance with *N.F.P.A.* 72-2007, and adopted by reference;
- and
- (3) notification of alarm activation is received at a constantly monitored location.";

(43) Chapter 9, Section 903.3.5 (Water supplies) of the *I.B.C.*, is revised by deleting the reference to the "*International Plumbing Code*" and replacing it with "Plumbing Code as adopted by 8 AAC 63.010, as amended as of December 6, 2003 and as amended from time to time";

(44) Chapter 9, Section 903.3.6 (Hose threads) of the *I.B.C.*, is revised by deleting "the fire code official" and replacing it with "AS 18.70.084";

(45) Chapter 9, Section 904.3.1 (Electrical wiring) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(46) Chapter 9, Section 907.1.1 (Construction documents) of the *I.B.C.*, is revised by adding the following required construction documents for plan review:

12. System riser diagrams.;

(47) Chapter 9, Section 907.2.3 (Group E) of the *I.B.C.*, is revised by deleting Exception 3;

(48) Chapter 9, Section 907.2.3 (Group E) of the *I.B.C.*, is revised by adding a second paragraph to read: "Rooms used for sleeping or napping purposes within a day care use of a Group E occupancy must be provided with smoke alarms that comply with Section 907.2.10.1.2.";

(49) Chapter 9, Section 907.2.6.1 (Group I-1) of the *I.B.C.*, is revised by deleting Exception 1;

(50) Chapter 9, Section 907.2.10 (Single- and multiple-station smoke alarms) of the *I.B.C.*, is revised by adding a second paragraph to read: "When a plan review is required for an existing Group R occupancy, smoke alarms must be installed as described in Section 907.2.10.1.";

(51) Chapter 9, Section 907.2.10.1.3 (Group I-1) of the *I.B.C.*, is revised by deleting the Exception;

(52) Chapter 9, Section 907.5 (Wiring) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(53) Chapter 9, Section 907.17 (Record of completion) of the *I.B.C.*, is revised by adding a new sentence to read: "A copy of the acceptance test certificate verifying completion in accordance with *N.F.P.A 72-2007*, as adopted by reference, must be forwarded by the firm conducting the test to the state fire marshal or the deferred jurisdiction having authority within 30 days of the completion of the installation.";

(54) Chapter 9, Section 909.11 (Power systems) of the *I.B.C.*, is revised by deleting the references to the "*ICC Electrical Code*" and replacing them with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(55) Chapter 9, Section 909.12.1 (Wiring) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(56) Chapter 9, Section 909.16.3 (Control action and priorities) of the *I.B.C.*, the exception is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(57) Chapter 9, Section 910.1 (General) of the *I.B.C.*, is revised by deleting Exception 2;

(58) Chapter 10, Section 1009.1 (Stairway width) of the *I.B.C.*, is revised by adding an exception to read: "Exception 5: Stairs or ladders used only to attend equipment are exempt from the requirements of this section.";

(59) Chapter 10, Section 1009.5.2 (Outdoor conditions) of the *I.B.C.*, is revised by adding a sentence: "In occupancies other than Group R-3 and Group U occupancies that are accessory to Group R-3 occupancies, surfaces and landings which are part of exterior stairs in climates with snow or ice shall be designed to minimize the accumulation of the snow or ice;

(60) Chapter 10, Section 1010.7.2 (Outdoor conditions) of the *I.B.C.*, is revised by adding a sentence: "In occupancies other than Group R-3 and Group U occupancies that are accessory to Group R-3 occupancies, surfaces and landings that are part of exterior ramps in climates with snow or ice shall be designed to minimize the accumulation of the snow or ice;

(61) Chapter 10, Section 1014.5 (Egress balconies) of the *I.B.C.*, is revised by adding a sentence: "Exterior balconies shall be designed to minimize accumulation of snow or ice that impedes the means of egress.";

(62) Chapter 10, Section 1015.2.2 (Three or more exits or exit access doorways) of the *I.B.C.*, is revised by adding an exception to read: "Where access to three or more exits is required, the separation

distance of the third exit door or exit access doorway shall not be less than one-third of the length of the maximum overall diagonal dimension of the area served.";

(63) Chapter 10, Table 1017.1 (Corridor Fire-Resistance Rating) of the *I.B.C.*, is revised by adding a note to read: "R Occupancies shall be allowed to have a one-hour rated corridor without a sprinkler system when the corridor

1. serves any occupant load greater than 10;
2. serves less than 17 dwelling units; and
3. is less than three stories in height.";

(64) Chapter 10, Section 1019.1 (Minimum number of exits) of the *I.B.C.*, is revised by adding an exception to read: "Exception: Basements or the first level below the first story in all occupancies except Group R-3 occupancies, used exclusively for the service of the building, may have access to only one exit. Any other use of the basement or first level below the first story must have at least two exits arranged as described in Section 1014.2. For purposes of this Exception, storage rooms, laundry rooms, maintenance offices, and similar uses may not be considered as providing service to the building.";

(65) Chapter 10, Section 1026.1 (General) of the *I.B.C.*, is revised by deleting Exceptions 1, 2, 3, 4, and 7;

(66) Chapter 11, Section 1101.1 (Scope) of the *I.B.C.*, is revised by deleting the first sentence and adding sentences at the end of the section to read: "Compliance review by the state fire marshal's office is limited to the review of the accessible route, means of egress requirements of the code, and at least one accessible toilet room along the accessible route. Compliance with the requirements of this chapter and other provisions within this code for accessibility of persons with physical disabilities is the exclusive responsibility of the owner of the structure or design professional of record. An advisory plan review may be obtained regarding the design for accessibility of a structure from the office of the state coordinator for Americans with Disabilities Act at 801 West 10th Avenue, Suite A, Juneau, Alaska 99801; telephone (907) 465-6929.";

(67) Chapter 12, Section 1203.3.2 (Exceptions) of the *I.B.C.*, Exception 4 is revised by deleting "in accordance with the *International Energy Conservation Code*";

(68) Chapter 12, Section 1205.4.1 (Controls) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(69) Chapter 12, Section 1206.3.3 (Court drainage) of the *I.B.C.*, is revised by deleting the reference to the "*International Plumbing Code*" and replacing it with "Plumbing Code as adopted by 8 AAC 63.010, as amended as of December 6, 2003 and as amended from time to time";

(70) Chapter 14, Section 1403.2 (Weather protection) of the *I.B.C.*, is revised by deleting the words "in accordance with the *International Energy Conservation Code*" from the last sentence of the first paragraph;

(71) Chapter 14, Section 1405.10.4 (Grounding) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(72) Chapter 15, Section 1503.4 (Roof drainage) of the *I.B.C.*, is revised by deleting the reference to the "*International Plumbing Code*" and replacing it with "Plumbing Code as adopted by 8 AAC 63.010, as amended as of December 6, 2003 and as amended from time to time";

(73) Chapter 16, Section 1601.1 (Scope) of the *I.B.C.*, is revised by adding a second paragraph to read: "This chapter is adopted as design criteria for the structural safety of buildings constructed under this code. Review for conformance with this criteria is not performed by the office of the state fire marshal. Compliance with the requirements of this chapter, other provisions in this code for structural design, the Alaska Administrative Order No. 175, local government flood reduction ordinances, and federal oversight and authority through the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) under C.F.R. 44, Parts 59 - 60, revised as of October 1, 2006, is the exclusive responsibility of the building owner or design professional of record.";

(74) Chapter 17, Section 1701.1 (Scope) of the *I.B.C.*, is revised by adding a second paragraph to read: "The provisions of this chapter are adopted as criteria to guide the owner and the registered design professional in meeting the tests and special inspections necessary to assure conformance with the applicable standards adopted under this code. Tests and inspections required by this code are not performed by the office of the state fire marshal, but are the responsibility of the building owner or design professional of record. The findings of these tests and inspections must be kept for the life of the building.";

(75) Chapter 27, Section 2701.1 (Scope) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(76) Chapter 27, Section 2702.1 (Installation) of the *I.B.C.*, is revised by deleting the reference to the "*ICC Electrical Code*" and replacing it with "Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time";

(77) Chapter 31, Section 3103.1 (Temporary Structures) of the *I.B.C.*, the first sentence is revised to read: "The provisions of this section apply in deferred jurisdictions as allowed under 13 AAC 50.075 only, for structures other than tents and membrane structures, erected for a period of less than 180 days.";

(78) Chapter 31 of the *I.B.C.* is revised by deleting Section 3107 (Signs) and Section 3109 (Swimming Pool Enclosures and Safety Devices);

(79) Chapter 33, Section 3305.1 (Facilities required) of the *I.B.C.*, is revised by deleting the reference to the "*International Plumbing Code*" and replacing it with "Plumbing Code as adopted by 8 AAC 63.010, as amended as of December 6, 2003 and as amended from time to time";

(80) Chapter 34, Section 3401.3 of the *I.B.C.*, is revised to read: "Compliance with other codes. Alterations, repairs, additions, and changes of occupancy to existing structures must comply with the provisions for alterations, repairs, additions, and changes of occupancy in the *International Fire Code (2006 Edition)* as adopted by reference; the Plumbing Code as adopted by 8 AAC 63.010, as amended as of December 6, 2003 and as amended from time to time; the *International Mechanical Code* as adopted by reference; and the Electrical Code as adopted by 8 AAC 70.025, as amended as of June 14, 2006 and as amended from time to time.";

(81) Chapter 34, Section 3403.1.1 (Flood hazard areas) of the *I.B.C.*, is revised to read: "This Section 3403 is adopted as criteria to guide the owner or the registered design professional of record. Plans are not reviewed by the office of the state fire marshal for compliance. Compliance with the requirements of this section, Alaska Administrative Order No. 175, local government flood reduction ordinances, and federal oversight and authority through the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) under C.F.R. 44, Parts 59 - 60, revised as of October 1, 2006, is the exclusive responsibility of the owner or the registered design professional of record.";

(82) Chapter 34, Section 3406 (Change of Occupancy) of the *I.B.C.*, is revised by deleting Section 3406.2 (Certificate of occupancy);

(83) Chapter 34, Section 3409.1 (Scope) of the *I.B.C.*, is revised by adding a sentence at the end of the first paragraph to read: "This Section 3409 is adopted as a guidance for accessibility";

(84) Chapter 34, Section 3410.2 of the *I.B.C.*, is revised to read: "Applicability. Structures meeting the definition of "existing structure" under Section 202 of this code in which there is work involving additions, alterations, or changes of occupancy must conform to the requirements of this section or the provisions of Sections 3403 - 3407 of this code.";

(85) Chapter 34, Section 3410.3.2 (Compliance with other codes) of the *I.B.C.*, is revised by deleting the words "and *International Property Maintenance Code*";

(86) Chapter 35 (Referenced Standards) of the *I.B.C.* is revised by changing or adding the referenced standards from the publication date listed to the following edition, and the standards are adopted by reference:

N.F.P.A. 10-2007 Portable Fire Extinguishers;

N.F.P.A. 13-2007 Installation of Sprinkler Systems ;

N.F.P.A. 13D-2007 Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes;

N.F.P.A. 13R-2007 Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height;

N.F.P.A. 14-2007 Standpipe and Hose System;

N.F.P.A. 20-2007 Installation of Stationary Pumps for Fire Protection;

N.F.P.A. 72-2007 National Fire Alarm Code;

N.F.P.A. 750-2006 Standards on Water Mist Fire Protection Systems;

(87) Appendix of the *I.B.C.* is revised by adding a new Appendix K as follows:

"APPENDIX K REPAIRS TO BUILDING AND STRUCTURES DAMAGED BY THE OCCURRENCE OF A NATURAL DISASTER"

K101 Purpose. The purpose of this appendix is to provide a defined level of repair for buildings or structures damaged by a natural disaster in jurisdictions where the governor has declared a formal condition of disaster emergency under AS 26.23 by proclamation.

K102 General. Required repair levels must be based on the ratio of the estimated value of the repairs required to restore the structural members to their pre-disaster condition to the estimated replacement value of the building or structure.

K103 Structural repairs. When the ratio described in Section K102 does not exceed 10 percent, as determined by design professionals who are professional architects or professional engineers who meet the requirements of AS 08.48 buildings and structures, except essential facilities included as Category III buildings and structures in Table 1604.5 of this code, must, at a minimum, be restored to their pre-disaster condition. When the ratio described in Section K102 is greater than 10 percent but less than 50 percent, buildings and structures, except essential facilities included as Category III buildings and structures in Table 1604.5 of this code, must have the damaged structural members, including all critical ties and connections associated with the damaged structural members, all structural members supported by the damaged member, and all structural members supporting the damaged members repaired and strengthened to bring them into compliance with the force levels and connection requirements of this code. These requirements apply to those essential facilities when the ratio described in Section K102 is less than 30 percent.

Exception: For buildings or structures with rigid diaphragms where the above-required repair and strengthening increases the rigidity of the resisting members, the entire lateral force-resisting system of the building or structure must be investigated.

When, in the opinion of the building official, an unsafe or adverse condition has been created as a result of the increase in rigidity, the condition must be corrected. When the ratio described in Section K102 is greater than 50 percent, buildings and structures, except essential facilities included as Category III buildings and structures in Table 1604.5 of this code, must, at a minimum, have the entire building or structure strengthened to comply with the force level and connection requirements of this code. These requirements apply to essential facilities when the ratio described in Section K102 is greater than or equal to 30 percent.

K104 Nonstructural repairs to light fixtures and suspended ceilings. Under all ratios calculated under K102, when light fixtures and the suspension systems of a suspended acoustical ceiling are damaged, the damaged light fixtures and suspension systems must be repaired to fully comply with the requirements of Section 803.9.1.1 of this code. Undamaged light fixtures and suspension systems must have the additional support and bracing that is required in Section 803.9.1 of this code.";

(88) Appendix of the *I.B.C.* is revised by adding a new APPENDIX L as follows:

"APPENDIX L OIL AND GAS INDUSTRIAL PROCESSING BUILDINGS

L101 General. These provisions have been established to provide engineering methods for the design and construction of Hydrocarbon Processing Buildings in this state.

L102 Scope. These standards supersede the respective requirements of the 2006 *International Building Code (I.B.C.)*, *International Mechanical Code (I.M.C.)*, *International Fire Code (I.F.C.)* and *International Fuel Gas Code (I.F.G.C.)* as the minimum requirements for occupancies when designing and constructing hydrocarbon buildings in this state.

L102.2 Small unoccupied structures, shelters, and enclosures, such as a wellhead shelter (any item that is put over the top of the wellhead that totally encloses the wellhead), communications shelters (unoccupied buildings with no hazardous vapors, gases, or products open to the atmosphere within the structure and that is utilized solely for the housing of wires and their components), meter building, and shut-down valve enclosures may be classified as a Group U occupancy if the following conditions are met:

1. The building is less than 1,000 square feet;
2. The contents of the building include only meters, valves, or pipe work;
3. The building is not normally occupied more than once during a 12-hour period; and
4. If the building exceeds 250 square feet, the building has at least two exits.

L103 Basic allowable module size, height, and separation. The basic allowable module size, height, and separation for Hydrocarbon Processing Buildings must comply with Appendix L103.1 - L103.3 of this Code.

L103.1 Area and height. The maximum allowable floor area for Hydrocarbon Processing Buildings using a minimum of Type IIB construction is 10,000 square feet and the building may only be one story. The maximum allowable height shall be 65 feet; the reference datum shall be the top of the first floor framing system. Penthouse and roof structures are permitted to extend above the 65 foot height limit to meet special requirements, including aerial coolers, towers, and tower enclosures. Allowable area and building height increases permitted by Sections 504 and 506 of the *I.B.C.* do not apply.

L103.1.1 Service area platforms. An elevated platform or series of platforms of Hydrocarbon Processing Buildings may not be classified as a floor or mezzanine within a building, and are not subject to the requirements of Section 505 of the *I.B.C.* Access and egress requirements for service area platforms must be served by at least two exits per level, with one being directly to an exterior stair. Platforms must be constructed of grating-type material so that the main floor level below is visible through the platform. Upper service area platforms must be kept to the minimum size that is necessary to accomplish occasional service, operating duties, and safe egress. Virtual wall-to-wall grating on upper levels is considered a story and must be included in floor area calculations.

L103.2 Module separation. Hydrocarbon processing buildings must comply with the provisions of Section 501.2 as amended by this code and Sections 704 and 721.6.2.3 of the *I.B.C.*, for all occupancies. Elevated pipe ways extending from a building may not be considered "extensions" of the building.

L103.2.1 Building extensions and service area platforms. Building extensions of Hydrocarbon Processing Buildings into the yard, include landings, platforms, stairs, vessels, vessel enclosures, tanks, and exhaust or intake hoods. Clear and unobstructed access for fire fighting is to be no less than 40 feet. Bridging between buildings must be designed to allow access and operation for firefighting.

L104 Stairs, landings, handrails, and guardrails. Stairs, landings, handrails, and guardrails must meet the minimum requirements of 8 AAC 61, as amended as of March 9, 2001 and as amended from time to time; these regulations supersede the respective requirements of the *I.B.C.*

L104.1 Floor level at doors. Floors or landings may be more than one inch lower than the threshold of doorways if an attempt is made to minimize the drop through the use of ramps at interior doorways as described in Section 1008.3.1.6 of the *I.B.C.*

L105 Construction specifics. The construction of Hydrocarbon Processing Buildings must comply with Appendix L105.1 - L105.4 of this Code.

L105.1 Fire walls. When a fire wall is used to qualify under Section 705 of the *I.B.C.*, the wall must comply with that section. If the fire wall does not extend to the ground, the structural supports for the wall must rest upon, and be completely supported by the pilings.

L105.2 Tank support fireproofing. Fire proofing requirements for steel tank supports, as described in Section 3404.2.9.1.3 of the *I.F.C. (2006 Edition)* as adopted by reference, may be waived by the building official when justified, based on the remoteness of the facility and lack of public access, or analytical or empirical results indicating that sufficient heat could be transmitted to the permafrost to cause foundation settlement.

L105.3 Foam plastic insulated building panels. For hydrocarbon processing buildings used in the actual processing of hydrocarbons and, not normally used in other mineral extraction or manufacturing activities, foam plastic insulated building panels used on these buildings shall apply a foam plastic insulated building panel with a thermal barrier with an index of 15. Factory Mutual approval Standard 4880 or Underwriters Laboratory (UL) Subject 1040 are acceptable tests for the purposes of approval under Section 2603.4 of the *I.B.C.*

L105.4 Electrical or communication equipment shelters and wellhead shelters. Thermal barrier requirements as described in Section 2603.4 of the *I.B.C.* are not required for fiberglass or metal sheeting used for construction of electrical or communication equipment shelters and wellhead shelters if the following conditions are met:

1. Foam used must meet the requirements described in Section 2603.3 of the *I.B.C.*;
2. The area of an individual shelter may not exceed 1,000 square feet;
3. Separation between individual shelters must be a minimum of six feet;
4. Each wellhead shelter shall only enclose one wellhead;
5. The electrical or communication shelter or wellhead shelter must normally be unoccupied. It is understood that operators need to spend approximately 10 minutes per day taking readings in wellhead shelters and that maintenance is infrequently required. The most extensive maintenance is well wireline work. This work may extend to a week per well and occur once every several year per well. Most of this work is accomplished from outside the wellhead shelter. All maintenance is strictly controlled with a permit system;
6. The electrical or communication shelters designed with workstations in the facility do not qualify for this modification.

L106 Fire suppression. The provisions in Sections L106.1 - L106.3 establish the standards for fire suppression at Oil and Gas Hydrocarbon Processing Buildings.

L106.1 Alternate Automatic Fire-Extinguishing (AAFE) system automatic activation for gas detection. In areas of Hydrocarbon Processing Buildings where (1) both fire and explosion hazards exist, (2) both fire and gas detection systems are installed, (3) the fire and gas detection devices alarm at a continuously staffed control room and trained operators can quickly respond to the fire and gas alarms following specific fire and gas alarm response procedures, and (4) collateral fire damage is likely to be minimal, the following (AAFE) operating activation mode is acceptable: Automatic activation of the (AAFE) system upon gas detection coupled with manual activation of the same (AAFE) system on fire detection.

L106.2 Manual activation of total flooding fire suppression systems. In areas where (1) the only hazard is fire, not explosion, (2) fire detection devices alarm at continuously staffed control rooms, (3) trained operators can quickly respond to the fire alarms following specific fire alarm response procedures, and (4) collateral fire damage is likely to be minimal, manual activation of the total flooding fire suppression agent is acceptable. These areas also include continuously staffed control rooms.

L106.3 Platform width. In buildings protected with fire sprinkler systems, any platform that exceeds four feet in width or length is considered an obstruction for the purposes of the installation of sprinkler systems under Section 903.3.1.1 of the *I.B.C.*"

History: Eff. 6/25/69, Register 30; am 2/21/71, Register 37; am 6/15/79, Register 71; am 1/14/81, Register 77; am 8/2/86, Register 99; am 10/28/90, Register 116; am 6/10/93, Register 126; am 3/7/96, Register 136; am 8/31/96, Register 139; am 3/27/99, Register 149; am 9/15/2001, Register 159; am 8/27/2004, Register 171; am 9/12/2007, Register 183

Authority: AS 18.70.080

Editor's note: Copies of the *International Building Code, 2006 Edition (I.B.C.)* may be obtained from the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478; telephone: (800) 423-6587; or at www.iccsafe.org.