

**2003 INTERNATIONAL FIRE CODE  
WITH AMENDMENTS  
(Effective January 3, 2005)**

The 2003 International Fire Code shall be known as the “I.F.C.” or the “fire code” and may be cited and referred to as such.

The following amendments by additions, deletions, revisions and exceptions are made to the Fire Code.

Section 104.1 General Authority and Responsibilities is amended to read as follows:

The International Fire Code shall be administered and enforced by the Building Official of the City of Wheat Ridge and designated assistants, who shall perform the following functions,

1. Approval of plans for building new structures and remodeling of existing structures.
2. The inspection of all construction of new structures and the remodeling of existing structures.
3. The destruction of unsafe structures.
4. The International Fire Code shall be enforced by the Division of Fire Prevention of the Wheat Ridge Fire Protection District and the Division of Fire Prevention of all adjoining Fire Protection Districts, for the functions as listed, pertaining to each jurisdictions respective amendments.

The Fire Marshal or his designated representative shall be responsible, as the designee of the Building Official of the City of Wheat Ridge, for the administration and enforcement of the Code and shall enforce all ordinances of the jurisdiction.

Wherever this code refers to the Chief in the context of Code administration or enforcement, it shall refer to the Fire Marshal or designated representative by the Building Official.

Wherever the code refers to the Chief in the context of fire suppression, it shall mean the Chief of the Wheat Ridge Fire Department and the Chiefs of the adjoining Fire Departments.

**Section 103.4.1, Legal defense, is hereby amended in its entirety to read as follows:**

*“103.4.1 Legal defense. Any suit instituted against any officer or employee of any fire protection district or of any officer or employee of the City of Wheat Ridge because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the fire protection district or City by which he or she is employed until the final termination of the proceedings. The fire code official, city officer or employee, or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code; and any officer or employee of the department of fire prevention*

or the City, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.”

**Section 105.2.2, Inspection authorized.**

Section 105.2.2, Inspection authorized, is hereby amended by adding a sentence to the end of the paragraph to read as follows:

“Twenty-four hours notice shall be provided to the division of fire prevention for required inspections and tests.”

**Section 105.6, Required operational permits.**

Section 105.6, Required operational permits, is hereby deleted with the exception of section 105.6.44, Temporary membrane structures, tents and canopies, which section 105.6.44 shall be adopted as written.

**Section 108.1, Board of appeals established.**

Section 108.1, Board of appeals established, is hereby amended in its entirety to read as follows:

*“108.1 Board of appeals established.* In order to hear and decide appeals of orders, decisions, or determinations made by the fire code official relative to the application and interpretation of this code, there is hereby created a board of appeals. The board of appeals shall be known as the Building Code Advisory Board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The fire code official shall be an ex officio member of said board but shall have no vote on any matter before the board.”

**Section 108.3, Qualifications.**

Section 108.3, Qualifications, is hereby deleted.

**Section 109.3, Violation penalties.**

Section 109.3, Violation penalties, is hereby amended in its entirety to read as follows:

*“109.3 Violation penalties.* Persons, firms, or corporations who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a fire code violation, punishable by a fine, or by imprisonment, or both, not to exceed the limits established within the City of Wheat Ridge City Code. The denial, suspension, revocation, or restriction of any permit or other privilege conferred by this code shall not be regarded as a penalty for purposes of this

chapter. Each day that a violation continues after due notice has been served shall be deemed a separate offense.”

**Section 111.1, Order.**

Section 111.1, Order, is hereby amended in its entirety to read as follows:

“*111.1 Order.* Whenever the fire code official finds any work regulated by this Code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the fire code official, with concurrence of the building official, is authorized to issue a stop work order.”

**Section 304.2.1, Trash enclosures.**

Section 304.2.1, Trash enclosures, is hereby added to read as follows:

“*304.2.1 Trash enclosures.* Trash enclosures shall be constructed of block or brick with metal gates or doors as approved by the Community Development Department.”

**Section 308.3.1.1, Open Flame and Liquefied-petroleum – gas – fueled cooking devices.**

Section 308.3.1.1, Liquefied – petroleum – gas – fueled cooking devices, is hereby amended in its entirety to read as follows:

“*308.3.1.1 L-P – gas burners* having L-P gas container with a water capacity up to 20 pounds [nominal 1 pound (0.454 kg) L-P gas capacity] may be used on combustible construction.”

Section 308.3.1.Exception #2 is deleted from adoption.

**Section 315.2.5, Marking maximum permitted storage height.**

Section 315.2.5, Marking maximum permitted storage height, is hereby added to read as follows:

“*315.2.5 Marking maximum permitted storage.* When storage areas are constructed that do not meet the requirements for high piled combustible storage or sprinkler system design densities, a minimum of a four (4) inch (101.6mm) stripe on a contrasting background shall be placed at twelve (12) feet (4.176m) above the finished floor to designate the maximum permitted storage height, and clearly justified with the designation: 'No Storage Above This Line'.”

**Section 503.2.1, Dimensions.**

Section 503.2.1, Dimensions, is hereby amended in its entirety to read as follows:

“503.2.1 *Dimensions*. Fire apparatus access roadways in other than residential streets shall have an unobstructed width of not less than twenty-four (24) feet (7315mm) and an unobstructed vertical clearance of not less than thirteen (13) feet six (6) inches (4115mm). Private streets shall not be less than twenty-six (26) feet (7935mm) wide and shall have an unobstructed vertical clearance of not less than thirteen (13) feet six (6) inches (4115mm).

Exception: The width of private streets may be reduced from the required twenty-six (26) feet (7935mm) if a specific access and parking design is approved by the fire code official.”

### **Section 503.2.3, Surface.**

Section 503.2.3, Surface, is hereby amended in its entirety to read as follows:

“503.2.3 *Surface*. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced with the first lift of asphalt as to provide all-weather driving capabilities.”

### **Section 503.2.5.1, Group R, Division 3 occupancies.**

Section 503.2.5.1, Group R, Division 3 occupancies, is hereby added to read as follows:

“503.2.5.1 *Group R, Division 3 occupancies*. Where a property is a Group R, Division 3 occupancy, the length of a dead end fire department access roadway may be increased to one-hundred seventy-five (175) feet (53,340mm) without the provisions for the turning around of fire apparatus if approved by the fire code official.”

### **Section 503.2.8, Curbs.**

Section 503.2.8, Curbs, is hereby added to read as follows:

“503.2.8 *Curbs*. Vertical curbs shall not be placed at the entrance of or within fire access lanes and roads. Hollywood style curbs may be used if approved by the fire code official.”

### **Section 503.2.9, Gated communities.**

Section 503.2.9, Gated communities, is hereby added to read as follows:

“503.2.9 *Gated communities*. Gated communities may be permitted, provided the community meets the requirements as detailed herein and subject to the approval of the fire code official. The access roadways within a gated community shall be a minimum of twenty-eight (28) feet (8534mm) of unobstructed width and be maintained as an all-weather surface and maintained as needed to provide all-weather driving capabilities and requirements of section 503 of the fire code. Unobstructed vertical clearance shall not be

less than thirteen (13) feet six (6) inches (4115mm). Two separate means of ingress/egress shall be provided into the site. Gates shall be staffed on a twenty-four (24) hour basis or be equipped with an automatic and manual system approved by the fire code official.”

**Section 503.2.10, Fire protection in recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots.**

Section 503.2.10, Fire protection in recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots, is hereby added to read as follows:

*“503.2.10 Fire protection in recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots. Recreational vehicle, mobile home, and manufactured housing parks, sales lots, and storage lots shall provide and maintain fire hydrants and access roads in accordance with Sections 503.1 and 508. Fire hydrant locations and minimum required fire flows shall be approved by the fire code official.*

Exception: Recreational vehicle parks located in remote areas shall be provided with protection and access roadways as required by the fire code official.”

**Section 506.3, Key box installation.**

Section 506.3, Key box installation, is hereby added to read as follows:

*“506.3 Key box installation. All buildings with a required fire alarm system or automatic fire extinguishing or standpipe system shall be provided with a key box in a location approved by the fire code official. The key box shall be of an approved type.”*

EXCEPTION: Individual units within retail and office units that do not contain sprinkler control valves, fire alarm panels, or fire protection equipment are not required to provide keys to gain access to other individual units.”

**Section 508.5.1, Where required.**

Section 508.5.1, Where required, is hereby amended in its entirety to read as follows:

*“508.5.1 Where required. The location, number, and type of fire hydrants connected to a water supply capable of delivering the minimum required fire flow shall be provided on the public street or on the site of the premises or both to be protected as required and approved. A fire hydrant shall be installed and maintained within one hundred fifty (150) feet (45,720mm) of a fire department connection serving a sprinkler or standpipe system. When installation of fire protection including fire apparatus access roads and water supplies for fire protection, is required, such protection shall be made serviceable prior to the time of above grade construction.*

Exceptions:

1. When the alternate means of protection, as approved by fire code official, are provided, the requirements of section 508.1 may be modified or waived.
2. For Group R-3 and Group U occupancies that distance requirement shall be 500 feet (152,400mm).
  - 2.2 When street widths are reduced in Group R-3 and Group U occupancies to less than thirty two (32) feet (9753mm), the distance requirement shall be three hundred (300) feet (91,440mm).
3. For all buildings with the exception of Group R-3 and Group U occupancies and buildings that are equipped throughout with an approved automatic sprinkler system installed in accordance with sections 903.1.1 or 903.3.1.2. The distance requirement shall be 300 feet (91,440mm).

**Section 508.5.7, Marking of fire protection equipment.**

Section 508.5.7, Marking of fire protection equipment, is hereby added to read as follows:

*“508.5.7 Marking of fire protection equipment. Fire protection equipment and fire hydrants shall be clearly identified in an approved manner to prevent obstruction by parking and other obstructions. See also sections 508.5 and 505.5.5. Fire hydrants shall be painted colors that are approved by the Water District of jurisdiction.”*

**Section 603.9.1, Gas meter identification.**

Section 603.9.1, Gas meter identification, is hereby added to read as follows:

*“603.9.1 Gas meter identification. Gas meters shall be identified with the building address and/or unit number.”*

**Section 605.1, Abatement of electrical hazards.**

Section 605.1, Abatement of electrical hazards, is hereby amended by the addition of a second paragraph to read as follows:

*“Wiring systems, including covers, shall be maintained as required in the National Electrical Code for their original installation.”*

**Section 605.3.1.2, Main electrical disconnect labeling.**

Section 605.3.1.2, Main electrical disconnect labeling, is hereby added to read as follows:

*“605.3.1.2 Main electrical disconnect labeling. Electrical rooms containing the main electric disconnect shall be identified with a permanently affixed sign with letters not less than one (1) inch (25mm) in height on a contrasting background to read “MAIN ELECTRICAL DISCONNECT.”*

**Section 605.3.1.3, Labeling of address or unit disconnects.**

Section 605.3.1.3, Labeling of address or unit disconnects is hereby added to read as follows:

*“605.3.1.3 Labeling of address or unit disconnects. Electrical disconnects shall be identified with the address and/or unit number in accordance with the electrical code.”*

**Section 901.6.2, Records.**

Section 901.6.2, Records, is hereby amended in its entirety to read as follows:

*“901.6.2 Records. Records of all system inspections, tests, and maintenance required by the referenced standards shall be maintained at the premises for a minimum of three years and a copy of the current inspection shall be forwarded to the division of fire prevention.”*

**Section 903.1.2, Location of sprinkler control valves.**

Section 903.1.2, Location of sprinkler control valves, is hereby added to read as follows:

*“903.1.2 Location of sprinkler control valves. When automatic sprinkler systems are provided within a building and the system serves more than one tenant space, the main control valves shall be placed within a room that has access provided from the building exterior. The door to said room shall be not less than three (3) feet (914mm) in width by six (6) feet eight (8) inches (2030mm) in height. The door shall be appropriately labeled with a permanent sign with letters having a principal stroke of not less than three fourths (3/4) inch (19mm) wide and at least six (6) inches (152mm) tall.”*

**Section 903.2.1.6. Group B Occupancies is hereby created to read as follows:**

Group B Occupancies: “An automatic sprinkler system shall be installed in Group B Occupancies where the floor area exceeds 12,000 square feet or 18,000 square feet on combined floors and mezzanines.”

**Section 903.2.2. Group E Occupancies is hereby revised to read as follows:**

Group E Occupancies: “An automatic sprinkler system shall be installed in Group E Occupancies where the floor area exceeds 12,000 square feet or 18,000 square feet on combined floors and mezzanines.”

**Section 903.2.2.2 is hereby created and shall read as follows:**

Group F-2 Occupancies: “An automatic sprinkler system shall be installed in Group F-2 Occupancies where the floor area exceeds 12,000 square feet or 18,000 square feet on combined floors and mezzanines.”

**Section 903.2.9.1.2 is hereby created to read as follows:**

Group S-2 Occupancies: “An automatic sprinkler system shall be installed in Group S-2 Occupancies where the floor area exceeds 12,000 square feet or 18,000 square feet on combined floors and mezzanines.”

**Section 903.2.13.1. is hereby created to read as follows:**

Group R-3 Occupancies: “An automatic sprinkler system shall be installed in Group R, Division 3 Occupancies where the floor areas under the horizontal projections of the roof exceeds 12,000 square feet.

**Section 903.3.7.1, Hose connection locations.**

Section 903.3.7.1, Hose connection locations, is hereby added to read as follows:

“*903.3.7.1 Hose connection locations.* The fire department hose connections for a sprinkler system shall be located within one hundred fifty (150) feet (45,720mm) of a fire hydrant. Hose connections shall be located a minimum height of three (3) feet (194mm) and a maximum height of four (4) feet (1219mm) above the finished grade.”

**Section 903.4.2.1, Audible and visual signals.**

Section 903.4.2.1, Audible and visual signals, is hereby added to read as follows:

“*903.4.2.1 Audible and visual signals.* Audible and visual fire alarm signals shall be connected to every automatic sprinkler system. Such audible and visual signals shall be activated throughout the building upon water flow.”

**Section 904.11, Commercial cooking systems.**

Section 904.11, Commercial cooking systems, is hereby amended by deleting referenced standard numbers: 1. Carbon dioxide extinguishing system, NFPA 12, and 2. Automatic sprinkler systems, NFPA 13. The remaining referenced standards 3, 4, and 5 shall remain unchanged.

**Section 904.11.3, Carbon dioxide systems.**

Section 904.11.3, Carbon dioxide systems, is hereby deleted in its entirety.

Section 904.11.4, Special provisions for automatic sprinkler systems, is hereby deleted in its entirety.

**Section 904.11.7, Residential type cooking equipment.**

Section 904.11.7, Residential type cooking equipment, is hereby added to read as follows:

*“904.11.7 Residential type cooking equipment. When residential type cooking equipment is installed within Group A, B, E, F, S, and R-4 occupancies, a residential fire extinguishing system may be used in lieu of a commercial type fire extinguishing system with the approval of the fire code official and building official.”*

### **Section 905.1.1, Hose connection locations-standpipe systems.**

Section 905.1.1, Hose connection locations-standpipe systems, is hereby added to read as follows:

*“905.1.1 Hose connection locations-standpipe systems. Fire department hose connections for a standpipe system shall be located within 150 feet (45,720mm) of a fire hydrant, and a minimum of three (3) feet (914mm) and a maximum of four (4) feet (1219mm) above finished grade. A minimum of a three-foot (914mm) clear space shall be provided around the circumference of a fire department connection.”*

### **Section 905.1.2, Main control valve.**

Section 905.1.2, Main control valve, is hereby added to read as follows:

*“905.1.2 Main control valve. When standpipe systems are provided within a building and it serves more than one tenant space, the main control valve shall be located within a room that has access provided from the building exterior with a door for fire department access. Said door shall not be less than three (3) feet (914mm) in a width by six (6) feet eight (8) inches (2030mm) in height and shall be appropriately labeled with a permanent sign with letters having a principal stroke of not less than three-fourths (3/4) inch (19mm) wide and at least six (6) inches (152mm) tall.”*

### **Section 906.3, Size and distribution.**

Section 906.3, Size and distribution, is hereby amended in its entirety to read as follows:

*“906.3 Size and distribution. Multipurpose dry chemical portable fire extinguishers shall be ten (10) pounds (4.5kg), shall have a minimum UL classification of 4-A, and shall be rated to fight Class A, B, or C fire hazards.”*

### **Section 907.1.2.1, Type.**

Section 907.1.2.1, Type, is hereby added to read as follows:

*“907.1.2.1 Type.* All fire detection systems required by the fire code shall be a Class A Style E four wire loop system.

Exception: A self-testing system, which will bypass an inoperative or missing detector and still provide fire detection may be used in place of a four (4) wire loop system with the approval of the fire code official. Non-required systems may be a two (2) wire Class B system.

Remote indicating devices shall be provided on all required duct detectors, elevator and electrical panel rooms, and where detection device activation is not readily visible to responding fire fighters.”

**Section 907.2.3, Group E.**

Section 907.2.3, Group E, is hereby amended in its entirety to read as follows:

*“907.2.3 Group E.* Approved manual and automatic fire alarm systems shall be installed in Group E occupancies having an occupant load of 20 or more. Group E occupancies having an occupant load of more than five but not more than 19 shall be equipped with an approved hard wired 120-volt smoke detection system, with battery back-up, and which is interconnected in accordance with the International Residential Code.”

**Section 907.2.10.1.2.1, Group R-4.**

Section 907.2.10.1.2.1, Group R-4, is hereby added to read as follows:

*“907.2.10.1.2.1 Group R-4.* Group Homes classified as Group R-4 occupancies for the developmentally disabled containing more than five (5) persons, including staff, shall be provided with an approved automatic fire alarm system. Group homes having four (4) or fewer persons, including staff, shall be provided with an approved hard wired one hundred twenty (120) volt smoke detection system, with battery back up, and interconnected in accordance with the International Residential Code.”

**Section 907.2.10.1.2.2, Group R-4–Senior citizen care.**

Section 907.2.10.1.2.2, Group R-4-Senior citizen care, is hereby added to read as follows:

*“907.2.10.1.2.2 Group R-4 – Senior citizen care.* Structures used to provide for the care or housing of six or more senior citizens shall be equipped with an approved automatic fire alarm system installed in accordance with NFPA 72.”

**Section 907.15, Monitoring.**

Section 907.15, Monitoring, is hereby amended in its entirety to read as follows:

*“907.15 Monitoring.* Fire alarm systems required by this code shall be supervised by an approved central, proprietary, or remote station service or a local alarm, which will give an audible signal at a constantly attended station.”

### **Section 1008.1.8.3 Locks and Latches**

Section 1008.1.8.3 is hereby amended to read as follows:

Section 1008.1.8.3. Locks and latches shall be permitted to prevent the operation of doors where any of the following exits:

1. Places of detention or restraint.
2. In buildings in occupancy Groups A, E having an occupant load of 50 or less, Groups B, F, M and S. All others are required to have panic hardware on all egress doors. The main exterior door or doors are permitted to be equipped with a key-operated locking devices from the egress side provided:

The locking device is readily distinguishable as locked.

A readily visible sign posted on the egress side of all doors stating:

***THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED.*** The sign shall be in letters 1 inch high on a contrasting background.

### **Section 1008.1.9, Panic and fire exit hardware.**

Section 1008.1.9, Panic and fire exit hardware, is hereby amended by amending the second paragraph to read as follows:

“Each exit door in a means of egress from an occupancy of Group A or E having an occupant load of 50 or more and any occupancy of Group H-1, H-2, H-3 or H-5 shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.”

### **Section 1011.1.1, Additional exit signs.**

Section 1011.1.1, Additional exit signs, is hereby added to read as follows:

*“1011.1.1 Additional exit signs.* When exit signs are required by the building code, additional low-level exit signs, which are internally or externally illuminated, photo luminescent, or self-luminous shall be provided in corridors serving guest rooms in Group R, Division 1 occupancies and amusement

buildings. The bottom of such sign shall not be less than six (6) inches (152mm) nor more than eight (8) inches (203mm) above the floor level and shall indicate the path of exit travel. For exit and exit-access doors, the sign shall be on the floor or adjacent to the door with the closest edge of the sign within four (4) inches (102mm) of the doorframe.”

**Section 1027.3.1, Signs.**

Section 1027.3.1, Signs, is hereby added to read as follows:

“*1027.3.1 Signs.* Exit doors that could be obstructed from the outside shall be posted with a permanent sign on the exterior side of the door stating “EXIT DOOR – DO NOT BLOCK.” The sign shall consist of letters having a principal stroke of not less than three-fourths (3/4) inch (19mm) wide and at least six (6) inches (152mm) high on a contrasting background.”

**Section 2204.3, Unattended self-service motor fuel-dispensing facilities.**

Section 2204.3, Unattended self-service motor fuel-dispensing facilities, is hereby amended in its entirety to read as follows:

“Unattended self-service motor fuel-dispensing facilities shall not be permitted or operated.”

**Section 2204.3.1, General, through Section 2204.3.7, Quantity limits.**

Section 2204.3.1, General, Section 2204.3.2, Dispensers, Section 2204.3.3, Emergency controls, Section 2204.3.4, Operating instructions, Section 2204.3.5, Emergency procedures, Section 2204.3.6, Communications, and Section 2204.3.7, Quantity limits, are hereby deleted.

**Section 3308.2.2.1, Where allowed.**

Section 3308.2.2.1, Where allowed, is hereby added to read as follows:

“*3308.2.2.1 Where allowed.* Proximate audience displays may be conducted only within buildings that contain an approved automatic sprinkler system.”

**Section 3406.6.1.2.1, Vapor recovery device.**

Section 3406.6.1.2.1, Vapor recovery device, is hereby added to read as follows:

“*3406.6.1.2.1 Vapor recovery device.* It shall be unlawful for any driver, operator, or attendant to defeat or fail to use any vapor recovery device or system that has been provided for use with the vapor recovery device or system. All

equipment shall be approved and maintained for use with the vapor recovery system provided at the site.”

**Section 3804.2 Maximum capacity within established limits.**

Section 3804 .2 is hereby amended to read as follows:

Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons within the City limits of the City of Wheat Ridge

**Chapter 45, Referenced standards.**

Chapter 45, Referenced standards, is hereby amended by adding the following referenced standard on to the International Code Council Standard Reference list:

“Insurance Service Office  
160 Water Street  
New York, NY  
Insurance Service Office Guide for Determining Fire Flow, Fire  
Suppression Rating Schedule 1980”

**Chapter 45, Referenced standards.**

Chapter 45, Referenced standards, is hereby amended by deleting the following referenced standards from the National Fire Protection Association’s standard reference list: Referenced Standard 99, Health Care Facilities, and Referenced Standard 101, Life Safety Code.

All other referenced standards shall remain unchanged.

**Appendix B, Fire-flow requirements for buildings, Section B103.1, Decreases.**

Appendix B, Fire-flow requirements for buildings, Section B103.1 Decreases, is hereby amended in its entirety to read as follows:

“*B103.1 Decreases.* Decreases in the minimum required fire flow are permitted up to 50 percent, when the building is provided with an approved automatic sprinkler system installed throughout and in accordance with 903.3.1 standards. Section 903.3.1.2 NFPA 13R sprinkler systems are not permitted to be used for a reduction in minimum required fire flows in other than one and two family dwellings.

In areas where the required fire flow cannot be obtained, Group R-1, R-2, R-3, or R-4 new or remodeled residential occupancies shall have sprinkler systems

installed in accordance with section 903.3.1.1 of the building code, as amended. When it is determined that it is impractical to obtain the required fire flows as required herein for any other occupancy, a decrease shall not be granted without the approval of fire code official and building official. Any decrease in the required fire flows will require alternative means of fire protection and mitigation.”

**Appendix B, Fire-flow requirements for buildings, Section B103.2, Increases.**

Appendix B, Fire-flow requirements for buildings, Section B103.2, Increases, is hereby amended by adding a second paragraph to read as follows:

“When wood shingles or shake shingles are provided, an additional five hundred (500) gallons per minute (1893 L/min) shall be added to the total required fire flow.”