

COUNTY OF LARIMER, COLORADO
AMENDMENTS TO THE
2009

INTERNATIONAL BUILDING CODE
INTERNATIONAL EXISTING BUILDING CODE
INTERNATIONAL MECHANICAL CODE
INTERNATIONAL PLUMBING CODE
INTERNATIONAL ENERGY CONSERVATION CODE
INTERNATIONAL FUEL GAS CODE

1997 Uniform Code for the Abatement of Dangerous Buildings



Effective Date: July 31, 2011

**Amendments to the 2009 International Building Code,
2009 International Existing Building Code,
2009 International Mechanical Code,
2009 International Plumbing Code,
2009 International Energy Conservation Code,
1997 Uniform Code for the Abatement of Dangerous Buildings
and the 2009 International Fuel Gas Code.**

WHEREAS, the Chief Building Official of Larimer County, the Board of Appeals, and the Larimer County Planning Commission have recommended that the Board of County Commissioners adopt the 2009 International Codes named above with certain amendments, concurrent with the repealing of those portions of currently adopted 2006 International Codes that are to be superseded by the 2009 International Codes; and

WHEREAS, the said Board has found that said adoption would be in the best interest of the people of Larimer County, after a duly publicized public hearing on this matter;

NOW, THEREFORE, BE IT RESOLVED, that the 2009 International Building Code, 2009 International Existing Building Code, 2009 International Mechanical Code, 2009 International Plumbing Code, 2009 International Energy Conservation Code, 2009 International Fuel Gas Code, 1997 Uniform Code for the Abatement of Dangerous Buildings and Amendments thereto are hereby adopted and shall be part of the Larimer County Building Code effective July 31, 2011. The 2006 International Codes, and their amendments are hereby repealed.

IT IS FURTHER RESOLVED that the Deputy Clerk of this Board shall forthwith cause a certified copy of this resolution with revised amendments to be filed with the Clerk and Recorder for the County of Larimer.

Dated this 27th, day of June, 2011

BOARD OF COMMISSIONERS OF
LARIMER COUNTY COLORADO

By: _____
Chairman

(SEAL)
ATTEST:

DATE _____

Deputy Clerk
APPROVED AS TO FORM

Assistant County Attorney

2009 International Building Code (IBC)

Chapter 1 Administration

The following section is amended as follows:

101.1 Title. These regulations shall be known as the Building Code of Larimer County, hereinafter referred as "this code."

Amend the last sentence in this section to read as follows:

101.4.3 Plumbing.

The provisions of the most recent edition of the Larimer County Individual Sewage System Regulation enforced by the Larimer County Health Department shall apply to private sewage disposal systems.

The following section is hereby deleted in its entirety.

~~101.4.4 Property Maintenance.~~

The following section is amended as follows:

101.4.5 Fire Prevention. The provisions of the Fire code adopted and enforced by the applicable Fire District shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

The following section is amended as follows:

103.1 Creation of enforcement agency. The Building Department is hereby created and the official in charge shall be known as the Chief Building Official.

This section amended by modifying item #4 and 10 and adding items # 14, 15, 16 & 17 to read as follows:

Also, delete all headings and references under Electrical, Gas, Mechanical, Plumbing in this section. 105.2 Work exempt from permit. (Building)

4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the low side grade to the top of the wall provided the horizontal distance to the next uphill retaining wall is at least equal to the total height of the lower retaining wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
10. Shade cloth and 6 mil poly-roofed structures constructed for nursery or agricultural purposes, not including service systems.
14. Minor work valued at less than two thousand dollars (\$2000.00) when such minor work does not involve alteration of structural components, exits, fire-rated assemblies, plumbing, electrical, mechanical, fire-extinguishing systems, or repairs or clean up of dangerous buildings.
15. Roofing repair or replacement work not exceeding one square of covering per building.
16. Window replacement requiring no structural alterations.
17. Decorative fountains and pools which cannot contain water more than twenty-four (24) inches (610 mm) deep.

This section is amended to read as follows:

109.2 Schedule of permit fees. On buildings, structures, electrical, gas, mechanical and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required in accordance with the fee schedule as established by Larimer County.

This section is added to read as follows:

109.7 Re-inspections. A re-inspection fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is called for is not complete or when corrections called for are not made. This section is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with the requirements of this Code, but as controlling the practice of calling inspections before the job is ready for such inspection or re-inspection. Re-inspection fees may be assessed when the inspection record card is not posted or otherwise available on the work site, the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, for deviating from plans approved by the building official, or for failure to post a readily visible address. To obtain a re-inspection, the applicant shall pay the re-inspection fee in accordance with Larimer County fee schedule. In instances where re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

This section is amended to read as follows and add exception item #2:

111.2 Certificate issued. After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the building department, the building official shall issue a certificate of occupancy.

EXCEPTIONS:

1. Certificates of occupancy are not required for work exempt from permits under Section 105.2
2. Shell, agriculture, & accessory buildings and miscellaneous permits shall not receive certificates of occupancy; a letter of completion will be given upon request.

The following sentence has been added to this section to read as follows:

111.3 Temporary Certificate of Occupancy. There will be a \$600 fee for temporary certificate of occupancy. There will be a \$600 fee for temporary certificate of occupancy. A Temporary Certificate of Occupancy shall be valid for six months. If a full Certificate of Occupancy is issued within the first month, all but \$40 will be refunded. If a full Certificate of Occupancy is issued prior to the six month expiration, \$100 shall be refunded for each full month remaining out of the original six month validity period of the Temporary Certificate of Occupancy.

The following section is hereby amended to read as follows:

113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the ~~jurisdiction~~ Planning and Building Services Division.

The following section is hereby added to read as follows:

113.4 Administration. Persons desiring to appeal a decision of the building official to the Board of Appeals shall at the time of making such appeal, pay to the Larimer County Building Department a docket fee as specified in the Larimer County fee schedule. Written notice of hearing shall be given to all parties concerned at least fourteen (14) days prior to the hearing or by mailing the same to such parties' last known address by regular mail. The Board shall, from time to time, adopt such additional rules and regulations as it deems necessary and advisable for the conduct of its hearings and for carrying out the provisions hereof. The building official shall take immediate action in accordance with the decision of the board. All meetings or hearings shall be open to the public.

Chapter 2 Definitions

The following definitions are hereby amended or added:

202 Definitions.

BED & BREAKFAST FACILITIES – A facility providing accommodations for 6 guests or less that are also occupied as the single family residence of the proprietor.

FAMILY - Any number of persons who are related by blood, marriage or adoption. A single family dwelling may be occupied by one living unit which is one family plus two individuals who live with the family.

GUEST – is defined as an adult being over 12 years of age. For example, a family consisting of a mother, father and a 12-year old child would be considered two guests.

LIVING UNIT- One family, plus up to two additional individuals whose place of residence is with the family in the dwelling unit.

RESORT LODGE CABIN – Cabin that is a building or group of buildings, under single management and ownership, containing rooms and/or dwelling units available for temporary rental to guests where the primary attraction is generally recreational features or activities.

Chapter 3 Use and Occupancy Classification

The following section is amended by adding the following exceptions under R-1:

310.1 Residential Group R-1

Exceptions:

1. **Bed & Breakfast facilities** providing accommodations for 6 guests or less that are also occupied as the single family residence of the proprietor are permitted to comply with the International Residential Code.
2. **Resort lodge cabin** that is a building or group of buildings, under single management and ownership, containing rooms and/or dwelling units available for temporary rental to guests where the primary attraction is generally recreational features or activities, are permitted to comply with the International Residential Code. {Resort lodge cabins may be subject to the State of Colorado Accessibility Stds.}

This section is amended to read as follows:

312.1 General. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirement of this code commensurate with the fire and life hazard incidental to their occupancy. Group U agricultural structures that exceed 5,500 square feet shall comply with requirements of Appendix C of this code. Group U as classified in this section shall include, but not be limited to, the following: (Existing listing in code is not amended.)

Chapter 6 Types of Construction

Amend Table 601 by adding the following footnote to such table:

h. An automatic sprinkler system, when installed as an alternate to providing fire containment areas, as specified in the Chapter 9 amendment, may be used as a substitution for one hour fire-resistive construction throughout.

Chapter 7 Fire-Resistance-Rated Construction

702.1 Definitions. Amended by adding the following definition:

Fire-Containment Area. A portion of a story or basement which is totally enclosed by a smoke and draft barrier of not less than 1-hour, fire-resistive construction. All door openings penetrating such fire-containment areas shall be protected by a tight-fitting, smoke and draft control assembly as specified in Sections 715.4.3, 715.4.5 and 715.4.8. Openings other than doors and ducts shall be protected as specified in Sections 715.5 and 715.5.6 and shall be limited to a maximum of 25 percent of any one wall, in compliance with section 715.5.8.2. All duct penetrations shall be protected by dampers as specified in section 716, Table 716.3.2.1, (section 716.3.3.2-smoke dampers), except that such dampers shall be those that are automatic closing by actuation of a smoke detector. Self closing devices may be used in lieu of automatic closing devices on doors unlikely to be fixed open during normal conditions. Examples are: Doors at toilet rooms, stairways, closets and small storage rooms and similar areas.

Chapter 9 Fire Protection Systems

This section is amended by adding the exception to read as follows:

903.2 Where required.

Exception 2: Maximum Allowable Fire-Contained Areas, as identified in amendment Table 903.2.13(b), are required when an approved automatic sprinkler system is not provided.

The following table is added to read as follows:

TABLE 903.2.13(b) MAXIMUM ALLOWABLE FIRE-CONTAINMENT AREA (in square feet)

Occupancy	Type I		Type II		Type III		Type IV	Type V	
	A	B	A	B	A	B	HT	A	B
A-1	10000	10000	NP	NP	NP	NP	NP	NP	NP
A-2, A-3, A-4	10000	10000	5000	5000	5000	5000	5000	5000	5000
B, M, F-1, S-1, S-2	10000	10000	7000	5000	7000	5000	7000	7000	5000
E	10000	10000	7000	5000	7000	5000	7000	7000	5000
F-2	20000	20000	10000	7000	10000	7000	10000	10000	5000

5000 sq. ft =464.515 square meters (s.m.), 7000 sq. ft.= 650.321 s. m., 10000 sq. ft =929.03 s. m., & 20000 sq. ft.=1858.06s.m. Contact your local fire district to see if there are any further fire code requirements.

This section is amended to read as follows:

903.2.7 - Group M - Item #4

4. A Group M occupancy with a total combined floor area of more than 5,000 square feet and is used for the display and sale of upholstered furniture.

The following three sections are added to read as follows:

Section 907.9 through 907.11 Carbon monoxide detection

907.9 Carbon monoxide alarms. For new construction in Group R occupancies, an approved carbon monoxide alarm shall be installed outside of or within each separate sleeping area in the immediate vicinity of the bedrooms in

dwelling units or sleeping units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

907.10 Where required. Where work requiring a permit occurs in existing group R occupancies that have attached garages or in existing group R occupancies within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in locations noted in section 907.9 above.

907.11 Alarm requirements. Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

Chapter 10 Means of Egress

Add exceptions 6 and 7 to this section to read as follows:

1008.1.5 Floor elevation.

EXCEPTIONS:

6. Exterior doors other than the main entrance/exit door, in Groups R-2, R-3 and R-5 occupancies, may open at one intervening exterior step that is equally spaced between the interior floor level above and the exterior landing below provided the intervening step has a minimum tread depth of 12 inches (304.8 mm), a maximum riser height of 7 3/4 inches (196.85 mm) and a minimum width equal to the openable door width; and provided the door does not swing over the step.

7. Doors serving building equipment rooms which are not normally occupied.

The following section 1013.7 is added to read as follows:

1013.7 Below grade opening. All area wells, stair wells and light wells attached to any building that are located less than thirty-six (36) inches (914.4 mm) from the nearest intended walking surface and deeper than thirty (30) inches (762 mm) below the surrounding ground level, creating an opening greater than twenty-four (24) inches (609.6 mm) measured perpendicular from the building and with side walls of such well having a slope steeper than 2 horizontal to 1 vertical, shall be barricaded with guardrails conforming to this section around the entire opening, or be provided with an equivalent barrier (intended walking surface would be defined as a sidewalk, pathway, patio slab or other like surface).

EXCEPTIONS:

1. The access side of stairways need not be barricaded.
2. Area wells provided for emergency escape and rescue windows shall not be obstructed with grates or covers unless such barricades comply with Section 1026.4 of this code.
3. Covers or grates may be used over stairways and other openings used exclusively for service access.

Chapter 11 ACCESSIBILITY

The section is amended by adding the following:

1107.6 Group R. Group R occupancies shall be provided with dwelling units or guest rooms accessible to the physically handicapped as specified in the 2003 Colorado Revised Statutes Title 9 Article 5 Section 105 or as amended.

A portion of Title 9 Article 5 is included below for reference;

9-5-105. [Formerly 9-5-111] Exemptions for certain privately funded projects.

(1) Accessible dwelling units shall be provided as required in this article; except that this article does not apply to privately funded projects for the construction of a detached residence or residences or to other types of residential property containing less than seven residential units. For larger residential and transient accommodation projects, this article shall apply to one unit for each seven units or major fraction thereof, as follows:

For the purpose of determining the number of accessibility points required pursuant to subsection (2) of this section, the accessible dwelling unit types shall have the following point values:

ACCESSIBLE DWELLING UNIT TYPE:	ACCESSIBILITY POINT VALUE PER DWELLING UNIT:
Type A Dwelling unit	6
Type A Multistory dwelling unit	5
Type B Dwelling unit	4
Type B Multistory dwelling unit	3
Type B Visitable ground floor	1

(2) **Residential projects.** (a) A project shall be assigned accessibility points based on the number of units contained within the project as follows:

NUMBER OF UNITS WITHIN THE PROJECT;	ACCESSIBILITY POINTS REQUIRED:
0-6	0
7-14	6
15-28	12
29-42	18
43-57	24
58-71	30
72-85	36
86-99	42
100-114	48
115-128	54
129-142	60
143-157	66
158-171	72
172-185	78
186-199	84
ETC.	+ 6 Additional points every 14 units or fraction thereof.

(b) A project shall include enough accessible dwelling units to achieve at least the specified number of accessibility points required pursuant to paragraph (a) of this subsection (2). A project may use any combination of accessible dwelling unit types to comply with this section.

9-5-106. Implementation plan. The builder of any project regulated by this article shall create an implementation plan that guarantees the timely and evenly phased delivery of the required number of accessible units. Such plan shall clearly specify the number and type of units required and the order in which they are to be completed. Such implementation plan shall be subject to approval by the entity with enforcement authority* in such project's jurisdiction. The implementation plan shall not be approved if more than thirty percent of the project is intended to be completed without providing a portion of accessible units required by section 9-5-105; except that, if an undue hardship can be demonstrated, or other guarantees provided are deemed sufficient, the jurisdiction having responsibility for enforcement may grant exceptions to this requirement. The implementation plan shall be approved by the governmental unit responsible for enforcement before a building permit is issued.

*State of Colorado, Department of Regulatory Agencies, Civil Rights Division, Housing Compliance Specialist 1-800-262-4845.

Chapter 14 Exterior Walls

1403.5 Flood resistance. *Delete subsection and insert the following;*
Flood Plain Overlay Zone Districts established in the Larimer County Land Use Code Section 4.2.2

Chapter 15 Roof Assemblies and Rooftop Structures

Table 1505.1 in the code is replaced with the revised table on next page to show wildfire mitigation requirements:

TABLE 1505.1 - IBC MINIMUM ROOF COVERING CLASSIFICATION TYPES OF CONSTRUCTION

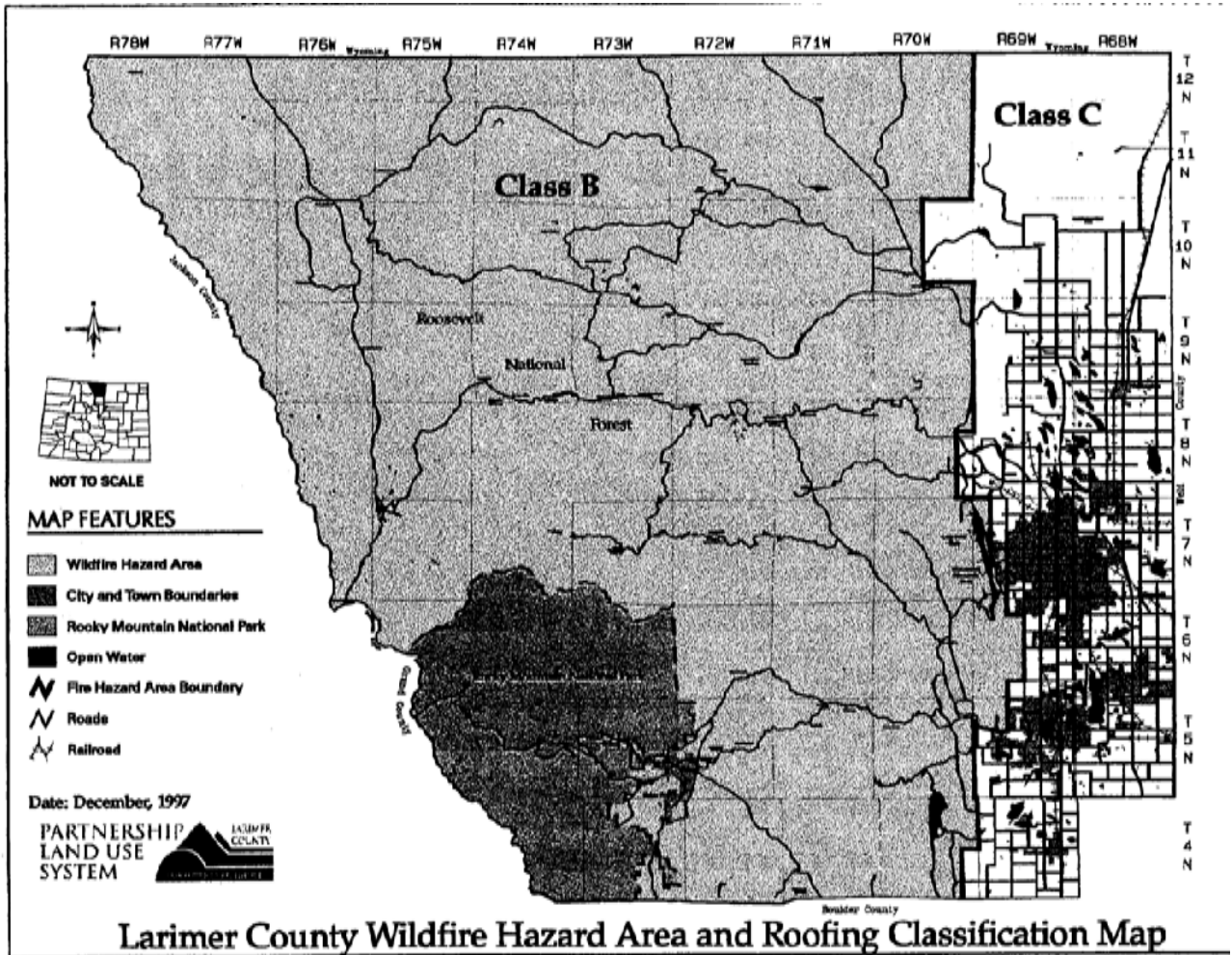
OCCUPANCY	I		II		III		IV	V	
	A	B	A	B	A	B	H.T.	A	B
A-1	B	B	---	----	----	---	----	----	----
A-2	B	B	B	----	B	---	B	B	----
A-3	B	B	B	B	B(1)	C(3)	B(1)	B(1)	C(3)
A-4, A-5	B	B	B	B	B(1)	C(3)	B(1)	B(1)	C(3)
B	B	B	B	B	B	B	B	B	B(1)
E	B	B	B	B	B(1)	C(3)	B(1)	B(1)	C(3)
F	A	A	A	A	----	----	----	----	----
H-1	A	B	B	B	B	B	B	B	B
H-2,3,4,5	A	B	B	----	B	----	B	B	----
I-1, 1.2	A	B	B(1)	----	B(2)	----	----	B(3)	----
I-3, I-4	B	B	B	B	B(1)	C(3)	B(1)	B(1)	C(3)
M	B	B	B	B	B(1,3)	C(3)	B(1,3)	B(1,3)	C(1,3)
R-1, R-2	B	B	B	B	C(3)	C(3)	C(3)	C(3)	C(3)
R-3, R-4	B	B	B	B	B(1)	C(3)	B(1)	B(1)	C(3)
S-1,	B	B	B	B	B	B	B	B	B(1)
S-2,	B	B	B	B	C(3)	C(3)	C(3)	C(3)	C(3)
U									

- A - Class A roofing.
- B - Class B roofing.
- C - Class C roofing.

Footnotes to table 1505.1 - IBC

- (1) Buildings that are not more than two stories in height above grade plane and have not more than 6,000 square feet (557.418 sq. meters) of projected roof area and where there is a minimum of 10 feet (3048 mm) from the extremity of the roof to the property line or assumed property line on all sides except for street fronts may have Class C roof coverings. See footnote (3) also.
- (2) See Section 408.
- (3) The roof covering on any new structure or on the re-roofing of 50 percent or more during a one year period of any existing structure located west of the following described line shall be upgraded from class C to class B: Starting at the intersection of the Wyoming border line and range 69 west, then South nine miles to S.W. corner of section 31, Township 11, Range 69, then West three miles to N.W. corner of Section 3, Township 10, Range 70, then South five miles to S.W. corner of Section 27, Township 10, Range 70, then East three miles to S.W. corner of Section 30, Township 10, Range 69, then South nine miles to S.W. corner of Section 7, Township 8, Range 69, then West one mile to N.W. corner of Section 13, Township 8, Range 70, then South four miles to S.W. corner of Section 36, Township 8, Range 70, then East two miles to N.W. corner of Section 6, Township 7, Range 69, then South three miles to S.W. corner of Section 17, Township 7, Range 69, then East one mile to S.E. corner of Section 17, Township 7, Range 69, then South four miles to S.W. corner of Section 4, Township 6, Range 69, then East one mile to S.E. corner of Section 4, Township 6, range 69, then South four miles to S.W. corner of Section 27, Township 6, Range 69, then West one mile to S.W. corner of Section 28, Township 6, Range 69, then South three miles to intersection of U.S. Highway 34, then West following U.S. Highway 34 two miles to intersection with Range 69 West, then South seven and three quarter miles to S.W. corner of Section 18, Township 4, Range 69, then West one mile to S.W. corner of Section 13, Township 4, Range 70, then South three miles to where the S.W. corner of Section 36, Township 9, Range 70 meets the Boulder County Line. (See roofing classification map on next page.)
- (4) Unless otherwise required because of location, Group U roof coverings shall consist of not less than one layer of cap sheet, or built-up roofing consisting of two layers of felt and a surfacing material of 300 pounds(136 kilograms) per roofing square of gravel or other approved surfacing material, or 250 pounds (113 kilograms) of crushed slag.

Roofing Classification Map on next page:



This section is added to read as follows:

1509.6 Roof Curbs. Mechanical units, ducts, piping or structures shall not be installed or replaced or rest on roofs without being properly supported by curbs, pads, bases or piers which shall be flashed to the roofing in a watertight manner. All unsupported sections of mechanical equipment shall be a minimum of twelve (12) inches (304.8 mm) above the plane of the roof so that they will not obstruct the re-roofing process. Mechanical units shall properly connect to heating, air handling, refrigeration and ventilation equipment, including fans, blowers, and similar types of equipment. Units shall be so located that proper drainage from the roof will not be blocked or impeded. Roof openings surrounded by curbs shall be sheathed over solidly and covered with a minimum of twenty-six (26) gauge (0.48 mm) metal approved for the use, or of equal material. All seams and miter corners shall be constructed in a watertight manner. Such curbs shall be a minimum of nine (9) inches (228.6 mm) in height.

Chapter 16 Structural Design

1608.2 Ground Snow Loads. *Add the following to this section:*

The minimum snow load designs shall be:

<u>Elevation</u>	<u>Snow Load</u>
Less than 7,000 feet (2133.6 M)	30 psf
7,000 to 8,000 feet (2133.6 M to 2438.4 M)	40 psf
8,001 to 9,000 feet (2438.7 M to 2743.2M)	50 psf
9,001 and above (2743.5 M & up)	70 psf

1609.3 Basic Wind Speed. *This section hereby amended to add the following:*

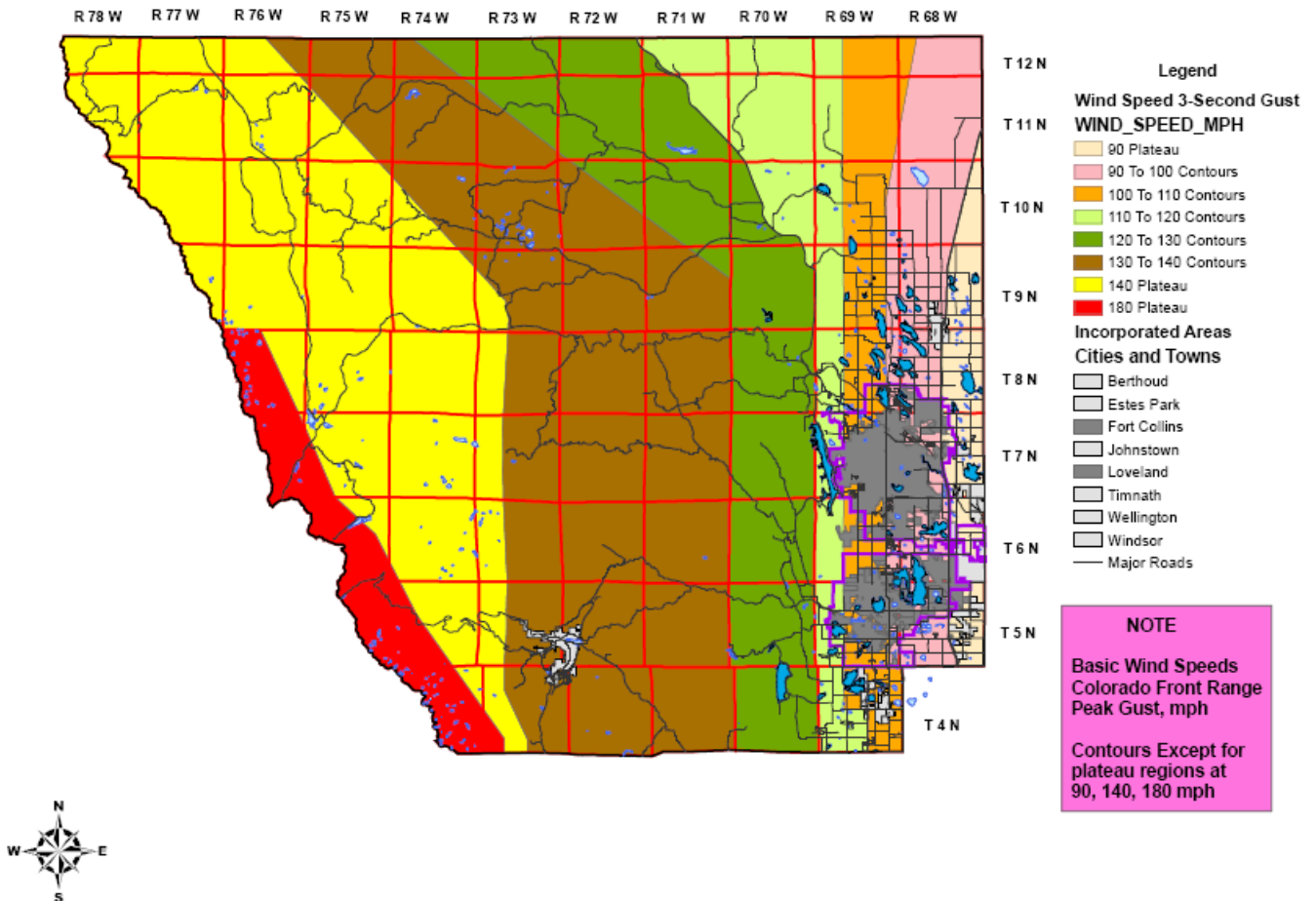
The Minimum Design Wind Speed shall be 100 mph (3-second Gust), Exposure C in rural areas and Exposure B in urban areas. The project Engineer may designate exposure on site specific conditions. **The required Wind Design Speed for any given project area shall comply with the Colorado Front Range Basic Wind Speeds Study Map.**

In areas of High Wind and high altitudes, such as the foothills and mountains, the effect of altitude on air density correction factor may be used.

Altitude (ft)	5,000	6,000	7,000	8,000	9,000	10,000
Correction Factor 0.86	0.84	0.81	0.79	0.76	0.74	

See the Wind Speed Zones Map this page.

Larimer County Wind Speed Map



1611.1 Design rain loads.

	<u>Location</u>	<u>Inches/Hour</u>	<u>GPM/Square Foot</u>
60-Minute Duration, 100-Year Return:	Fort Collins	2.6	0.027
	Loveland	2.66	0.0275

1612 Flood Loads. *Delete the entire section and insert the following:*

Flood Plain Overlay Zone Districts established in the Larimer County Land Use Code Section 4.2.2.

1613 Earthquake Loads-Site Ground Motion.

Earthquake 0.2 sec spectral response acceleration $S_s = 22.5$, Site Class B
 Earthquake 1.0 sec spectral response acceleration $S_1 = 7.0$, Site Class B

Chapter 18 Soils and Foundations

1809.5 Frost protection. *Add minimum frost depth.*

1. Extending below the frost line of the locality (**30 inches minimum**).

Chapter 21 Masonry

2111 Masonry Fireplaces

2111.1 Definitions. *Section amended by adding the following definitions:*

Non-restricted Area: That part of unincorporated Larimer County located west of Range 71 or North of the north half of Township 10, and east of Range 72 as shown on the Larimer County Fireplace Area Map.

Restricted Area: That part of unincorporated Larimer County located outside the Non-restricted Area as shown on the Larimer County Fireplace Area Map.

Wood stove: An appliance designed for or capable of burning wood and capable of and intended for domestic space heating or domestic water heating.

Fireplace insert: A wood burning device designed to be installed in an existing fireplace.

Fireplace: A hearth and fire chamber or similar prepared place in which a fire may be made and which is built in conjunction with a chimney.

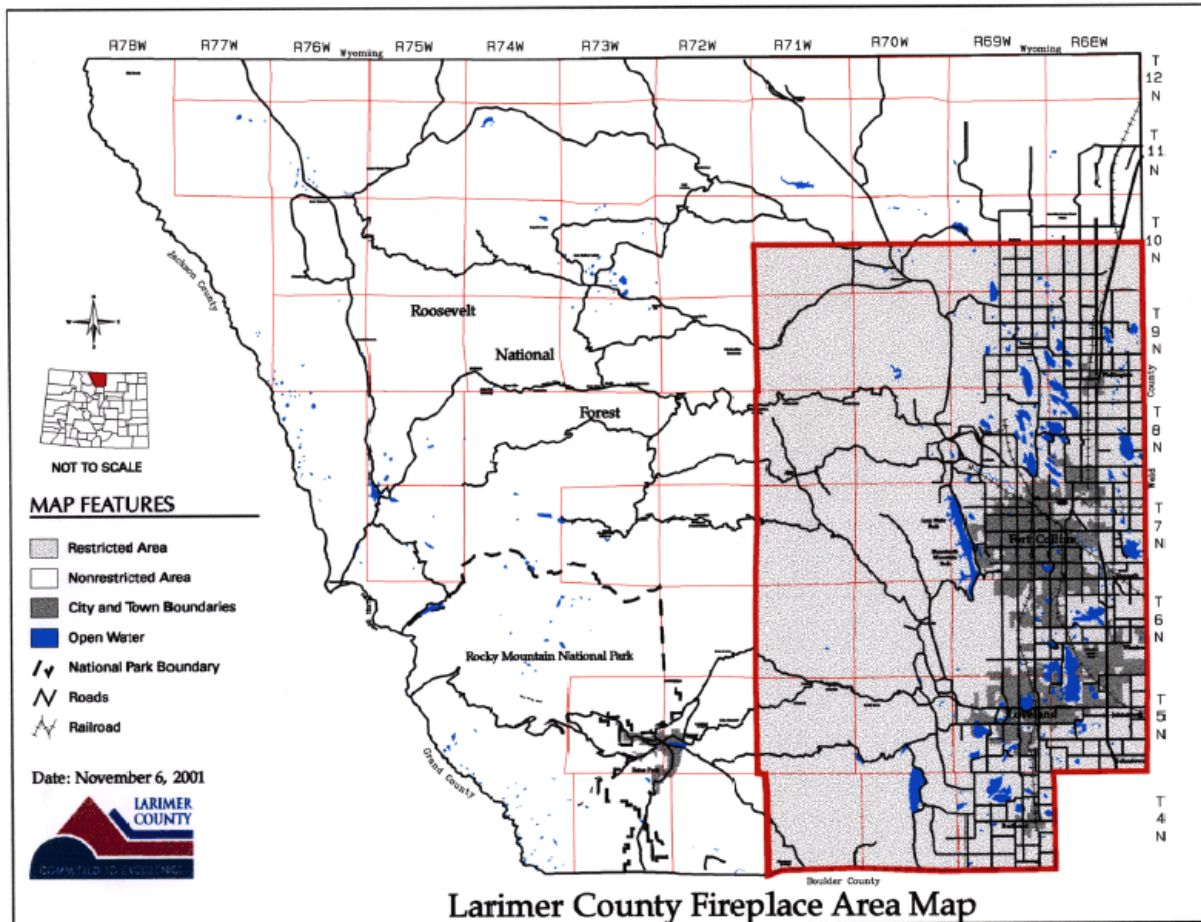
Factory-built Fireplace: A listed assembly of a fire chamber, its chimney and related factory-made parts designed for unit assembly without requiring field construction. Factory-built fireplaces are not dependent on mortar-filled joints for continued safe use.

Add the following section.

2111.14 Fireplace Installation.

- A. All fireplaces installed on or after January 1, 2002 in the Restricted Area shall be one of the following:
 - (i). A gas fireplace or fireplace with a gas log installed and functioning at time of final inspection;
 - (ii). An electric device; or
 - (iii). A fireplace that meets the Phase III emissions standards for wood stoves established by the Colorado Air Quality Control Commission or any other clean burning device that is approved by the commission.
- B. All fireplaces installed prior to January 1, 2002 in the Restricted Area shall be allowed to remain in use until such time as the owner voluntarily replaces it. Upon replacement, such fireplace shall be one of the types specified in Subsection (A) (i), (ii), or (iii) above.
- C. Within the Non-restricted Area, fireplaces, including but not limited to masonry and factory built fireplaces (such as metal and zero clearance fireplaces), shall be allowed and shall not be required to meet the standards in Paragraph (A) above.

See the Larimer County Fireplace Area Map on next page.



Chapter 34 Existing Structures

3412.2 Applicability. Structures existing prior to January 1, 1972, ...

Chapter 36 is hereby added into the 2009 International Building Code as follows:

CHAPTER 36 Wildfire Hazard Mitigation

WILDFIRE HAZARD MITIGATION REQUIREMENTS FOR NEW CONSTRUCTION

General

3601.0 Purpose. The purpose of this chapter is to establish minimum standards for design and construction of new buildings or portions thereof for the protection of life and property from wildfire.

3601.1 Scope. Within the wildfire hazard area, as defined by the **Wildfire Hazard Area Map** and foot note #3 of amended Table 1505.1, all new building construction and all additions equal to or greater than 50% of the total square footage of the original structure shall comply with the provisions of this chapter. New building construction shall include all new structures.

EXCEPTIONS: Loafing sheds and similar structures.

3601.2 Alternate Materials and Methods of Compliance. The provisions of this chapter are not intended to prevent the use of any material or method of compliance not specifically prescribed by this chapter, provided any alternate has been approved and its use authorized by the building official. The building official may approve any such alternate, provided it is found that the proposed design is satisfactory and complies with the provisions of this

chapter and this code and that the material method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this chapter in suitability, effectiveness, fire resistance, durability and safety. The building official shall require that sufficient evidence or proof be submitted to substantiate any claims that may be used regarding use of the alternate. The details of any action granting approval of an alternate shall be recorded and entered in the files of the Building Department.

3602.0 Definitions. For the purpose of this chapter, certain terms are defined as follows:

Combustible - a material that fails to meet the acceptance criteria of Standard Method of test for determination of noncombustibility in building materials.

Combustible construction - a type of construction that does not meet the requirement for noncombustible construction.

Defensible space - a natural or man-made area, where woody vegetation capable of allowing a fire to spread unchecked has been treated or modified to slow the spread and reduce the intensity of an advancing wildfire, and to create an area for fire suppression operations to occur.

Fire-resistive construction - construction designed to resist the spread of fire.

Fire-resistive rating - the time that the material or construction will withstand the standard fire exposure as determined by a fire test made in conformity with the standard methods of fire tests of buildings construction and materials.

Fire-retardant-treated wood - any wood product impregnated with chemicals by a pressure process or other means during manufacture, and which shall have a flame-spread index of not over 25.

Fire separation - a construction assembly that acts as a barrier against the spread of fire.

Firewall Assembly- a type of fire separation of noncombustible construction which subdivides a building or separates adjoining buildings to resist the spread of fire and which has a fire-resistance rating and structural ability to remain intact under conditions for the required fire-rated time.

Flame-resistant material - material that has been modified in its chemical composition by impregnation, coating or has inherent composition that makes the material resistant to ignition and combustion when exposed to a small ignition source.

Flame retardant - an approved chemical compound or mixture which, when applied in an approved manner to any fabric or other material will render such fabric or material incapable of supporting combustion.

Flame-spread index (FSI) - a relative index describing the surface-burning characteristics of building materials. The test used to establish FSI evaluates the flame spread over the building material surface when exposed to a test fire. The rate at which flame spreads across the specimen is compared on a scale of 0 for inorganic reinforced cement board, to 100 for red oak." The following table identifies the flame-spread index and Flame Spread Classification:

Flame Spread Classification	Flame Spread Index
Class I	0 to 25
Class II	26 to 75
Class III	76 to 200

Fuel - combustible material.

Noncombustible - materials that meet the acceptance criteria of Standard Method of test for determination of non-combustibility in building materials.

Noncombustible Construction - a type of construction in which a degree of fire safety is attained by the use of noncombustible materials for structural members and other building, assemblies.

One-hour Fire-resistive Construction – construction that will “withstand the standard fire exposure” for one hour “as determined by a fire test made in conformity with the standard methods of fire tests of building construction and materials”.

Slash - unusual concentrations of downed fuel resulting from such natural events as wind, fire, or snow breakage or such human activities as timber harvesting, road construction, or building construction.

Wildfire Hazard - the relative likelihood that a fire, once started, will become disastrous. Disastrous means the destruction of life and improved property.

Wildfire Hazard Area - that area in western Larimer County prone to wildfires as identified on the county's Wildfire Hazard Area map.

Wildfire mitigation - any action taken to eliminate or reduce the long-term risk to human life and property from wildfire.

Wildfire Mitigation

3603.0 Fire-Resistive Construction. Fire-resistive construction on all new structures shall be one of the following types:

1. One-hour fire-resistive shell shall provide not less than one-hour fire-resistive construction at all exterior walls, EXCLUDING ALL OPENINGS AND DECKS.
2. Exterior siding materials shall have a flame-spread classification of Class III or better.

EXCEPTION: Log structures using solid logs with a minimum tip diameter of 6 inches (152.4 mm) for exterior wall construction and 8 inches (203.2 mm) for roof beams, purlins and supporting columns may be considered as one-hour fire-resistive construction.

3604.0 Defensible Space. Defensible space in compliance with current Colorado State Forest Service guidelines shall be required on all new construction in the Wildfire Hazard Area. For additions to or changes in character of the occupancy or use in existing buildings, the defensible space shall be provided around the entire building.

3604.1 Evaluation. Evaluation of the defensible space will be based upon:

1. Current Colorado State Forest Service standards and guidelines, and
2. Site specific vegetation and topographical characteristics.
3. The building official may allow alternatives to the Colorado State Forest Service Standards and Guidelines based on specific site conditions.

3604.2 Completion. The defensible space must be completed prior to the applicant receiving a certificate of occupancy.

3605.0 Liquid Propane Gas. Liquid propane gas facilities installed in the Wildfire Hazard Area shall comply with the current County requirements for installation of liquid propane gas facilities. It is recommended that the tank be located in the defensible space or on the same contour.

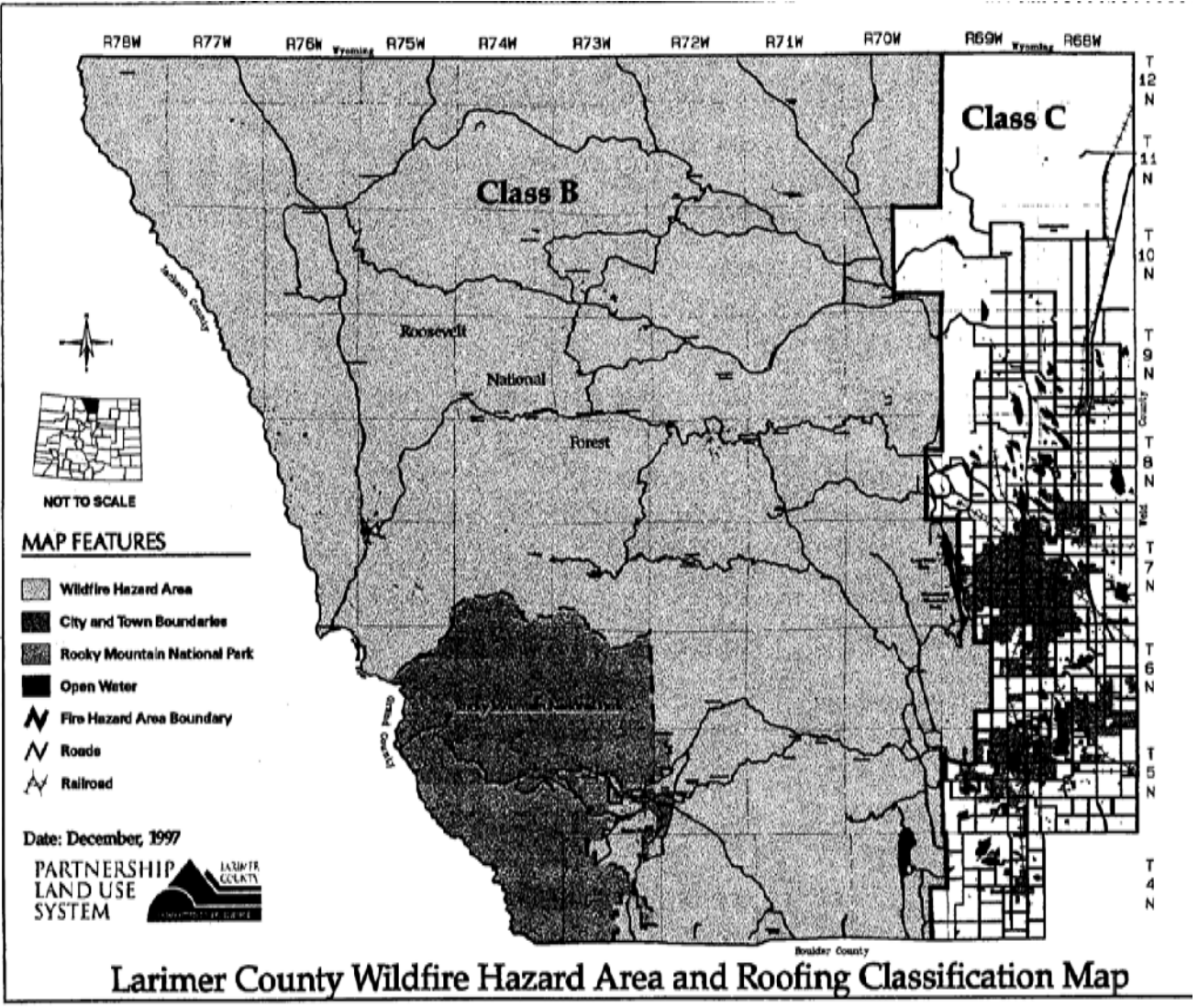
3605.1 Alternate Design. The building official may approve other alternate designs provided it meets the requirements of Section 104.11.

3606.0 Fees. Fees shall be assessed in accordance with the wildfire fees table currently adopted by Larimer County.

3607.0 Appeals. Appeals of interpretations made by the building official relative to the application of this chapter shall be made to the Board of Appeals.

3608.0 Maintenance. Defensible space areas created as required by this chapter or other referenced documents within the Larimer County Wildfire Mitigation Plan are to be maintained by the property owner. No re-planting or new planting of trees, shrubs or other vegetation that would violate the defensible space requirements of this chapter shall be allowed.

Please see the Larimer County Wildfire Hazard Areas and Roofing Classification Map on next page.



Appendix chapters C, E and I in the International Building Code are hereby adopted as part of the 2009 International Building Code:

Appendix C – Agricultural Buildings

Appendix E – Supplementary Accessibility Requirements

Appendix I – Patio Covers

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2009 International Existing Building Code (IEBC)

All references in this code to the International Property Maintenance Code are hereby deleted.

**Chapter 1
Administration**

The following section is hereby amended to read as follows:

101.1 Title. These regulations shall be known as the Existing Building Code of Larimer County, hereinafter referred to as “this code.”

The following section is hereby amended to read as follows:

101.4.2 Buildings Previously Occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Fire Code adopted and enforced by a fire district or as deemed necessary by the code official for the general safety and welfare of the occupants and the public.

The following section is hereby amended to read as follows:

103.1 Creation of enforcement agency. The Building Department is hereby created...

The following section is hereby amended to read as follows:

105.3 Application for Permit. To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the Building Department for that purpose. Such application shall....

The following section is hereby amended to read as follows:

107.1 General. The code official is authorized to issue a permit for temporary uses. Such permits shall be limited as to time of service but shall not be permitted for more than 18 months. The code official is authorized to grant extensions for demonstrated cause.

All references in this code to “the ICC Electrical Code” shall be amended to read:

Sections 107.3, 307.6, 708 & 908- “The National Electrical Code (NEC) as adopted and enforced by the State of Colorado”.

Add the following paragraph to the end of section 116.1:

Section 116 .1

Refer to the “1997 Uniform Code for the Abatement of Dangerous Buildings” for the classification and abatement of dangerous buildings. Where differences occur between the 2009 International Codes and the 1997 Uniform Code for the Abatement of Dangerous Buildings, the provisions of the 1997 Uniform Code for the Abatement of Dangerous Buildings shall apply in the abatement of dangerous buildings.

Amend the following sections to read as follows:

Sections 307.6, 307.7, 307.8 & 307.9 The code official shall ~~certify that the structure meets~~ inspect the structure for compliance with the intent of the provisions of law governing building construction for the proposed new occupancy and that such change of occupancy does not result in any hazard to the public health, safety and welfare.

Add the following section to read as follows:

Section 1201.3 Moved Buildings or structures. Buildings or structures moved into or within Larimer County shall comply with the provisions of the codes adopted when built or the first building or energy code adopted by Larimer County if built prior to building or energy codes being adopted. In addition such buildings or structures shall meet the requirements for Wind loadings, Snow loads, Flood Hazards Areas, Wildfire Hazard Areas, and Fireplace Restricted Areas of their new location.

1. The 2003 International Building Code, 2003 International Mechanical Code, 2003 International Plumbing Code, 2003 International Energy Conservation Code, and the 2002 National Electrical Code.

Amend to read as follows:

1301.2 Applicability. Structures existing prior to December 9, 1971.

=====

2009 INTERNATIONAL MECHANICAL CODE AMENDMENTS (IMC)

Chapter 1 Administration

Amend to read as follows:

101.1 Title. These regulations shall be known as the Mechanical Code of Larimer County, hereinafter referred to as “this code.”

Amend to read as follows:

Section 103.1 General. The Building Department is hereby created and the executive official in charge thereof shall be known as the building official.

Amend to read as follows:

106.5.2 Fee Schedule –A fee for Mechanical permits shall be paid to the building official as set forth in the current fee schedule for Larimer County.

Amend to read as follows:

108.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erect, install, alter, or repair mechanical work 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.

Amend sentence to read as follows:

108.5 Stop Work Orders. ...,shall be subject to penalties as prescribed by law.

Amend to read as follows:

109.2 Means of Appeal. The board of appeals created to hear matters of the International Building Code and International Residential Code shall be the Board of Appeals in all International Mechanical Code matters and their rules applied.

Delete sections 109.2.1, 109.2.2, 109.2.3, 109.2.4, 109.2.5, 109.2.6, 109.3, 109.4, 109.4.1, 109.5, 109.6, 109.6.1 and 109.6.2 as currently written in the IMC.

Section 109.7 shall become Section 109.3 by this amendment and as such is not deleted.

Chapter 5 Exhaust Systems

This section is deleted in its entirety.

~~Section 506.3-10-4~~

Chapter 6 Duct Systems

Section 603.18 is added to read as follows:

603.18 Duct protection during construction. During construction, all duct systems shall be protected from entrance of dirt. Construction debris and dust shall be removed from ducts and the furnace filter replaced prior to final inspection.

Chapter 8 Chimneys and Vents

Amend to read as follows:

801.19 Multi-story prohibited. Common venting systems for appliances located on more than one floor level shall be prohibited, except engineered systems where all appliances served by the common vent are located in rooms or spaces that are accessed from the outdoors. The appliance enclosures shall not communicate with occupiable areas of the building.

Chapter 9 Special Appliances, Fireplaces, and Solid Fuel Burning Equipment

Section 903.1.1 is added to read as follows:

903.1.1 Wood stoves and fireplace inserts. All wood stoves and fireplace inserts installed on or after January 1, 2002, in unincorporated Larimer County shall meet the Phase III emissions standards for wood stoves established by the Colorado Air Quality Control Commission.

All wood stoves and fireplace inserts installed prior to January 1, 2002, in unincorporated Larimer County shall be allowed to remain in use until such time as the owner voluntarily replaces it. Upon replacement, such wood stove or fireplace insert shall meet the Phase III emission standards for wood stoves established by the Colorado Air Quality Control Commission.

Definitions:

Non-restricted Area: That part of unincorporated Larimer County located west of Range 71 or North of the north half of Township 10, and east of Range 72 as shown on the Larimer County Fireplace Area Map.

Restricted Area: That part of unincorporated Larimer County located outside the Non-restricted Area as shown on the Larimer County Fireplace Area Map.

Wood stove: An appliance designed for or capable of burning wood and capable of and intended for domestic space heating or domestic water heating.

Fireplace insert: A wood burning device designed to be installed in an existing fireplace.

Fireplace is a hearth and fire chamber or similar prepared place in which a fire may be made and which is built in conjunction with a chimney.

Factory-built Fireplace is a listed assembly of a fire chamber, its chimney and related factory-made parts designed for unit assembly without requiring field construction. Factory-built fireplaces are not dependent on mortar-filled joints for continued safe use.

This section is hereby amended to read as follows:

903.3 Unvented gas log heaters.

Unvented gas log heaters shall not be installed in a factory built fireplace.

=====

2009 INTERNATIONAL PLUMBING CODE (IPC)

**Chapter 1
Administration**

Amend this section to read as follows:

101.1 Title. These regulations shall be known as the International Plumbing Code of Larimer County hereinafter referred to as "this code."

The following section is amended to read as follows:

103.1 General. The Building Department is hereby created and the executive official in charge thereof shall be known as the Chief Building Official.

Amend exception item 2 to read as follows:

106.2 Exempt work. The following work shall be exempt from the requirement for a permit:

1. The stopping of leaks in drains, water, soil, waste or vent pipe provided, however, that if any concealed trap, drainpipe, water, soil, waste, or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, the removal and replacement of fixtures, including the same or smaller size water heater, by State licensed plumbers, provided such repairs or replacements do not involve or require the replacement or rearrangement of valves, pipes, or vents.

Amend to read as follows:

106.6.2 Fee Schedule. A fee for all Plumbing work permits shall be paid to the building official as set forth in the current fee schedule as approved by the Board of County Commissioners for Larimer County.

Amend to read as follows:

106.6.3 Fee Refunds.

The building official is authorized to establish a refund policy.

Amend to read as follows:

108.4 Violation penalties.

Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erect, install, alter, or repair mechanical work 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.

Amend to read as follows:

108.5 Stop work orders. ...,shall be subject to penalties as prescribed by law.

Delete current text and amend to read as follows:

109.2 Membership of Board. The **Board of Appeals** created to hear matters of the International Building Code and International Residential Code shall be the Board of Appeals in all International Plumbing Code matters and their rules applied. Sections and subsections 109.2.1, 109.2.2, 109.2.3, 109.2.4, 109.2.5, 109.2.6, 109.3, 109.4, 109.4.1, 109.5, 109.6, 109.6.1 and 109.6.2 as written in the current 2009 IPC are deleted. Section 109.7 shall become Section 109.3 by this amendment and as such is not deleted.

**Chapter 2
Definitions**

Amend to read as follows:

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the International Building Code, International Fire Code, National Electrical Code (NEC) enforced by the State of Colorado, International Fuel Gas Code, or the International Mechanical Code, such terms shall have the meaning ascribed to them as in those codes.

Chapter 3 General Regulations

Amend to read as follows:

305.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall comply with State of Colorado Health Department Regulations.

Chapter 9 Vents Storm Drainage

Amended to read as follows:

904.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least 6 inches (152 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extension shall be run at least 7 feet (2134mm) above the roof.

Chapter 11 Storm Drainage

Amended to read as follows:

1107.2 Separate systems required. Secondary roof drain systems shall have the end point of discharge separate from the primary system. Such secondary drain endpoints shall discharge at grade or other approved point of discharge.

=====

2009 International Energy Conservation Code (IECC) (Zone 5)

Chapter 1 Administration

Amend to read as follows:

101.1 Title. These regulations shall be known as the Energy Conservation Code of Larimer County, and shall be cited as such. It is referred to herein as "this code."

Amend by adding the following exceptions to read as follows:

101.2 Scope. This code applies to residential and commercial buildings.

Exceptions:

1. Energy conservation systems and components in existing buildings undergoing repair, alteration or additions, and change of occupancy, shall be permitted to comply with the International Existing Building Code.
2. Agricultural buildings heated or cooled in its interior for short period of time and switched with a timer of 2 hours or less.
3. Agricultural buildings which are neither heated nor cooled by fossil fuel or electricity.
4. Agricultural buildings not heated above 50^o F.
5. Accessory buildings. Fully enclosed accessory buildings and attached garages not containing habitable space may be considered conditioned space subject to the following thermal and envelope criteria:
 - a.) Such spaces meet the criteria for thermal isolation and any HVAC equipment installed therein is sized for a peak design load assuming a maximum Winter Indoor Design Dry-bulb Temperature of (60^oF) and a minimum Summer Indoor Design Dry-bulb Temperature of (80^oF).
 - b.) The walls are insulated with insulation having a minimum R-value of R-13.
 - c.) The roof/ceiling is insulated with insulation having a minimum R-value of R-30.
 - d.) Windows have a maximum U-factor of 0.45 & in total do not exceed 10% of the floor area.

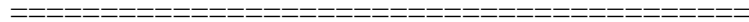
- e.) Doors have a minimum R-value of 3 and are sealed to prevent infiltration to the extent practical as determined by the building official.

Amend by adding Section 302.1 to read as follows:

302.1 Thermal design parameters in Climate Zone 5. The following thermal design parameters in shall be used for calculations required under this code:

- a.) Winter Outdoor Design Dry-bulb (4⁰F),
- b.) Winter Indoor Design Dry-bulb (72⁰F),
- c.) Summer Outdoor Design Dry-bulb (89⁰F),
- d.) Summer Indoor Design Dry-bulb (75⁰F),
- e.) Summer Design Wet-bulb (62⁰F),
- f.) 6368 Degree Days Heating, and
- g.) 479 Degree Days Cooling.

All heating and cooling equipment shall be sized such that the total sensible capacity of the cooling equipment does not exceed the total sensible load by more than 7% for cooling-only applications; or by more than 25% for cold-climate applications in accordance with the procedures in ACCA Manual J, 8th Edition, using the above thermal design parameters. All ducted air-distribution heating and cooling systems shall be sized using cooling loads. All heating and cooling equipment shall be tested to ensure such equipment is operating within the manufacturers' recommended parameters and standards according to the applicable protocols established by the building code official and in accordance with the mechanical code adopted by Larimer County.



2009 International Fuel Gas Code (IFGC)

Chapter 1 Administration

Amend to read as follows:

101.1 Title. These regulations shall be known as the Fuel Gas Code of Larimer County, hereinafter referred to as "this code."

Amend to read as follows:

106.6.2 Fee schedule. The fees for work shall be as indicated schedule by the current fee schedule for Larimer County.

Amend to read as follows:

106.6.3 Fee refunds. The building official is authorized to establish a refund policy.

Amend to read as follows:

108.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erect, install, alter, or repair mechanical work 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.

Amend the last sentence to read as follows:

108.5 Stop work orders. ...,shall be subject to penalties as prescribed by law.

Chapter 3 General Regulations

Delete Exceptions 3 and 4 concerning unvented appliances and heaters.

303.3 Prohibited locations.

Exceptions:

- ~~—3.~~
- ~~—4.~~

Amend the leading sentence by to read as follows:

304.5 Indoor combustion air. The required volume of indoor air shall be determined in accordance with Section 304.5.1 or 304.5.2, when it is shown that the infiltration rate is at least 0.40 air changes per hour or Section 304.5.2 shall be used.

Amend the leading sentence to read as follows:

308.4.6 Clearance from supply ducts. Central-heating furnaces where the bonnet temperature exceeds 150 degrees Fahrenheit (65.56 degrees Celsius), shall have the clearance from supply ducts.....

Chapter 4 Gas Piping Installation

Amend to read as follows:

404.10 Minimum burial depth. Underground piping systems shall be installed a minimum of 18 inches (457.2 mm) below grade, except as provided in Section 404.9.1.

Amend to read as follows:

404.10.1 Individual outside appliances. Individual lines to outside lights, grills, or other appliances shall be installed a minimum of 18 inches (457.2 mm) below finished grade.

Exception: Approved materials installed a minimum of 6 inches (152 mm) below finished grade when covered with a minimum 4 inch thick (101.6 mm) concrete slab.

Amend this section to read as follow and add exception #2 to read as follows:

404.13 Outlet closures.

Gas outlets and fittings which allow for future gas line expansion that do not connect to appliances shall be provided with an approved gas shutoff valve with the end capped gas tight.

Exceptions:

2. Drip/Dirt legs which are installed at the floor level at appliances.

Amend to read as follows:

405.1 General. Changes in direction of hard metallic pipe shall be permitted to be made by the use of fittings or factory bends.

Delete this section in its entirety:

405.2 Metallic pipe.

Amend the leading sentence to read as follows:

406.4.1 Test pressure. The test pressure to be used shall be no less than 1 ½ times the proposed maximum working pressure, but not less than 10 psig (68.9476 kPa gauge), irrespective of design pressure.

Replace in its entirety Section 406.7 to read as follows:

Section 406.7 Purging requirements. The purging of piping shall be in accordance with Sections 406.7.1 through 406.7.3.

406.7.1 Piping systems required to be purged outdoors. The purging of piping systems shall be in accordance with the provisions of Sections 406.7.1.1 through 406.7.1.4 where the piping system meets either of the following:

1. The design operating gas pressure is greater than 2 psig.
2. The piping being purged contains one or more sections of pipe or tubing greater than 2 inches in nominal size and exceeding the lengths in Table 406.7.1.1.

406.7.1.1 Removal from service. Where existing gas piping is opened, the section that is opened shall be isolated from the gas supply and the line pressure vented in accordance with Section 406.7.1.3. Where gas piping meeting the criteria of Table 406.7.1.1 is removed from service, the residual fuel gas in the piping shall be displaced with an inert gas.

Table 406.7.1.1

Size and Length of Piping Nominal Pipe Size (inches)	Length of Piping (feet)
2 ½	> 50
3	> 30
4	> 15
6	> 10
8 or larger	Any length

(For SI units: 1 inch = 25.4mm; 1 ft =304.8mm.)

406.7.1.2 Placing in operation. Where gas piping containing air and meeting the criteria of Table 406.7.1.1 is placed in operation, the air in the piping shall first be displaced with an inert gas. The inert gas shall then be displaced with fuel gas in accordance with Section 406.7.1.3.

406.7.1.3 Outdoor discharge of purged gases. The open end of a piping system being pressure vented or purged shall discharge directly to an outdoor location. Purging operations shall comply with all of the following requirements:

1. The point of discharge shall be controlled with a shutoff valve.
2. The point of discharge shall be located at least 10 feet from sources of ignition, at least 10 feet from building openings and at least 25 feet from mechanical air intake openings.
3. During discharge, the open point of discharge shall be continuously attended and monitored with a combustible gas indicator that complies with Section 406.7.1.4.
4. Purging operations introducing fuel gas shall be stopped when 90% fuel gas by volume is detected within the pipe.
5. Persons not involved in the purging operations shall be evacuated from all areas within 10 ft of the point of discharge.

406.7.1.4 Combustible gas indicator. The combustible gas indicator used during purging operations shall be listed and shall be calibrated in accordance with the manufacturer's instructions and recommended schedule. The combustible gas indicator used for pipe discharge monitoring shall numerically display a volume scale from 0% to 100% with a resolution of not greater than 1% increments.

406.7.2 Piping systems allowed to be purged indoors or outdoors. The purging of piping systems shall be in accordance with the provisions of Section 406.7.2.1 where the piping system meets both of the following:

1. The design operating gas pressure is 2 psig or less.
2. The piping being purged is constructed entirely from pipe or tubing of 2 inch nominal size or smaller, or larger size pipe or tubing with lengths shorter than specified in Table 406.7.1.1.

406.7.2.1 Purging procedure. The piping system shall be purged in accordance with one or more of the following:

1. The piping shall be purged with fuel gas and shall discharge to the outdoors.
2. The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through an appliance burner not located in a combustion chamber. Such burner shall be provided with a continuous source of ignition.
3. The piping shall be purged with fuel gas and shall discharge to the indoors or outdoors through a burner that has a continuous source of ignition and that is designed for such purpose.
4. The piping shall be purged with fuel gas that is discharged to the indoors or outdoors, and the point of discharge shall be monitored with a listed combustible gas detector in accordance with 406.7.2.2. Purging shall be stopped when fuel gas is detected.
5. The piping shall be purged by the gas supplier in accordance with written procedures.

406.7.2.2 Combustible gas detector. The combustible gas detector used during purging operations shall be listed and shall be calibrated or tested in accordance with the manufacturer's instructions and recommended schedule. The combustible gas detector used for pipe discharge monitoring shall indicate the presence of fuel gas.

406.7.3 Purging appliances and equipment. After the piping system has been placed in operation, appliances and equipment shall be purged before being placed into operation.

Amend to read as follows:

409.5.2 Vented Decorative appliances and room heaters.

Shutoff valves for vented decorative appliances and decorative appliances for installation in vented fireplaces shall not be prohibited from being installed in an area remote from the appliance where such valves are provided with ready access. Such valves shall be permanently identified and shall serve no other equipment. Remote valves shall be operable on the same floor as the appliance served and within 12 feet (3657.6 mm) as measured along the floor line. Piping from the shutoff valve to within 3 feet (914 mm) of the appliance connection shall be sized in accordance with Section 402.

Amend to read as follows:

410.3 Venting of regulators. Pressure regulators that require a vent shall have an independent vent to the outside of the building. The vent shall be designed to prevent the entry of insects, water or foreign objects. Vents shall not terminate within 3 feet (914 mm) of openings into the building.

Chapter 5 Chimneys and Vents

Amend item 1 and delete items 8 and 10:

501.8 Equipment not required to be vented. The following appliances shall not be required to be vented.

1. Residential Ranges.
2. Built-in domestic cooking units listed and marked for optional venting.
3. Hot plates and laundry stoves.
4. Type 1 clothes dryers (Type 1 clothes dryers shall be exhausted in accordance with the requirements of section 614).

- 5. A single booster-type automatic instantaneous water heater, where designed and used solely for the sanitizing rinse requirements of a dishwashing machine, provided that the heater is installed in a commercial kitchen having a mechanical exhaust system. Where installed in this manner, the draft hood, if required, shall be in place and unaltered and the draft hood outlet shall be not less than 36 inches (914 mm) vertically and 6 inches (152 mm) horizontally from any surface other than the heater.
- 6. Refrigerators.
- 7. Counter appliances.
- ~~8. Room heaters listed for unvented use.~~
- ~~9 8. Direct-fired make-up air heaters.~~
- ~~10. Other equipment listed for unvented use and not provided with flue collars.~~
- 44 9. Specialized equipment of limited input such as laboratory burners and gas lights.

Delete Section 503.2.2
503.2.2 Well-ventilated spaces.

Delete Exception in Section 503.5.6.1
503.5.6.1 Chimney lining. Chimneys shall be lined in accordance with NFPA 211.
Exception: Existing chimneys...

Amend this section to read as follows:
503.6.10.1 Equipment separation. All appliances connected to the common vent shall be located in rooms which have provisions for an adequate supply of combustion, ventilation, and dilution air that is not supplied from habitable space (see Figure 503.6.10.1).

Chapter 6 Specific Appliances

Add last sentence to paragraph to read as follows:
614.4 Exhaust Installation. Dryer exhaust duct terminations shall not be located within 3 feet (914 mm) of openings into the building.

Delete this section in its entirety.
621 UNVENTED ROOM HEATERS.

Amend to read as follows:
623.2 Appliance location. Cooking appliances designed, tested, listed and labeled for use in commercial occupancies may be installed within dwelling units or within any area where domestic cooking operations occur, when installed in accordance with manufacturer’s listing in regards to clearance to combustibles, ventilation and make up air requirements.

Amend to read as follows:
623.3 Domestic appliances. Cooking appliances installed within dwelling units and within areas where domestic cooking operations occur shall be listed and labeled as household-type appliances for domestic use and shall be installed in accordance with manufacturer’s listing in regards to clearance to combustibles.

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