

Arapahoe County adopted codes and design criteria

2009 International Building Code, IBC, including:

- Appendix C, Group U, Agricultural Buildings
- [IBC Amendments](#)

2009 International Residential Code, IRC, including Appendices:

- Appendix G, Swimming Pools, Spas and Hot Tubs
- Appendix H, Patio Covers
- [IRC amendments](#)

2009 Minimum Design Criteria

TABLE R301.2(1)

Ground Snow Load	Wind Design		Seismic Design Category	Subject to damage from			Winter Design Temp	Ice Barrier Underlayment required	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed MPH	Topographic Effects		Weathering	Frost Line depth	Termite					
30 # Roof 30# non-reducible	90 mph 3 second gust	No	B	Severe	36" inches	Slight to moderate	1 degree F	No	1989 FIRM: 1995	712	50.3 F

2009 International Plumbing Code

- [IPC amendments](#)

2009 International Mechanical Code

- [IMC amendments](#)

2009 International Fuel Gas Code

- [IFGC amendments](#)

2009 International Energy Conservation Code

- [IECC amendments](#)

2011 National Electrical Code, NEC

1997 Uniform Code for the Abatement of Dangerous Buildings

- [As amended](#)

A117.1-2003 ANSI manual

Elevator and Escalator Codes

ASME A17.1 – 2007, A17.3 – 2005, A18.1 – 2008 and ASCE 21 Parts 1, 2, 3, and 4

The amendments (underlined) to the text of the 2009 International Codes that are hereby adopted are to include the following modifications, additions and substitutions:

International Building Code

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

101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted, but may be used at any time as a reference.

101.4 Referenced codes Delete existing section 101.4.4 (property maintenance) and then modify and renumber the remaining sections, adding Section 101.4.5 Electrical.

101.4.3 Plumbing. The provisions of the International Plumbing Code along with applicable State amendments or regulations shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. Private sewage disposal systems shall be regulated by the Tri-County Health Department.

101.4.4 Fire prevention. The provisions of the International Fire Code or Uniform Fire Code shall be enforced by the Local Fire District having Jurisdiction. In all cases where the International Fire Code or Fire Code Standards are mentioned, the Building Official may use these documents as a reference, but in no case should it be construed to imply that these codes have been adopted in any form.

101.4.5 Electrical. The provisions of the most current adopted version of the National Electric Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

102.4 Referenced codes and standards. The codes when adopted by resolution and standards referenced in this amended code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply. Whenever any State law or regulation imposes higher standards than are required by this Code, the provisions of that law or regulation shall govern. Whenever the standards imposed by this Code are higher than the standards imposed by any other law or regulation or resolution of any governmental body, then the standards of this Code shall govern.

102.6 Existing structures. The legal occupancy of any structure 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 Arapahoe County Dangerous Building Code or the *International Fire Code*, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

SECTION 103 **BUILDING DIVISION**

103.1 Creation of enforcement agency. The Building Division is hereby created and the official in charge thereof shall be known as the building official.

103.2 Appointment. The building official shall be appointed by the Public Works and Development Director or Board of County Commissioners.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the Arapahoe County Board of Commissioners, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

104.10 Modifications. Change the last (4) words in the paragraph to Building Division.

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

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction for a specific permit may be approved on a case-by-case basis where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the limited purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. This Section does not give the building official the authority to allow the usage of alternative material design and methods of construction on an ongoing basis

105.2 Work exempt from permit. Add the following paragraph, and modify Building: Item 1, all else remains unchanged.

Work exempted from requiring any type of construction permit does not preclude any required approval from the Planning and Zoning department. Unless otherwise exempted by this Code, separate plumbing, electrical, and mechanical permits will be required for the above exempted items. Exemption from the permit requirements of this Code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this Code or any other laws or resolutions of this jurisdiction.

105.2 Building:

Item 1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.

Item 13. Non-fixed and movable fixtures, cases racks, counters and partitions not over 5 feet 9 inches in height. All racking systems over 8 feet in feet must have engineered plans provided.

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 Division for that purpose. Such application shall: (The remainder of the paragraph remains unchanged)

105.3.1 Action on application. The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing.

105.3.1.1 Issuance. The application, plans and specifications, and other data as requested by the Building Official, Zoning Administrator or the Public Works and Development director (the “supporting data”), filed by the applicant for a permit shall be reviewed by the Building Official, who shall confirm whether the data meets the technical requirements of this Code as well as whether the property is eligible for permit issuance. The application and other data shall also be reviewed for compliance with other County rules, regulations, resolutions and standards, including those described below. If the Building Official finds that the work described in an application for a permit and the supporting data conforms to the requirements of this Code and the other applicable rules, regulations, resolutions and standards, and that the fees specified in Section 108 have been paid, the Official shall issue a permit to the applicant. The property for which the applicant seeks a permit must be eligible for permit issuance. Eligibility exists if the property meets the following standards:

- a) The property has proper zoning for the improvements described in the application and supporting data, and the proposed improvements, when built and occupied in accordance with their expected use, will comply with all applicable zoning standards, including setbacks, access, open space and parking requirements, signage, land use restrictions, and related restrictions and conditions.
- b) The applicant has received approval, when required, from the County’s Floodplain Administrator, related to compliance with the County’s Floodplain Regulations.
- c) The grading and drainage proposed for the property following completion of the Project complies with the development plan for the site and applicable County stormwater management and grading regulations.
- d) Taxes for the property are current and not delinquent.

Acceptance of a permit constitutes the agreement by the property owner and the applicant to continue to comply with the Code, the County’s flood plain regulations, the conditions set forth on the plat and the development plan for the property, the County’s grading, erosion and sediment control requirements, the subdivision, and stormwater management regulations, and all applicable zoning regulations. The applicant and owner further agree that the Building Official shall have the power to suspend, revoke or cancel any permit if at any time the Building Official or his/her designee observes or is informed by other County personnel of violations of any of the above regulations (or other applicable regulations, resolutions or laws) on the property or caused by the applicant or owner on or near the property. Applicant and owner further agree that the Building official’s power with respect to permits shall include the power to refuse inspections, the power to refuse to issue and the power to revoke certificates of occupancy. Persons may appeal an erroneous decision of the Building Official refusing to issue, attaching conditions to issuance, or the suspension, revocation or cancellation of a permit or certificate of occupancy to the Board of County Commissioners or its designee stating the reason that the decision was erroneous. The appeal shall be in writing and shall attach all supporting documentation, and

the appeal by staff for the Board, the Board shall review the decision of the Building Official for compliance with the requirements of the Building Code and such other County regulations, resolutions or ordinances. The Board may take action reversing the decision in whole or part, within thirty days of receipt of receipt of the appeal. If not reversed, in whole or part, within thirty days of receipt of the appeal if not reversed, in whole or part, within the above time periods, the decision of the Building Official shall be final.

105.5 Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended, abandoned or if no County inspections have been performed for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. The fee for an extension shall be one-half the amount required for a new permit for such work.

105.7 Placement of permit. The building permit ~~or copy thereof~~ shall be kept on the site of the work until the completion of the project.

105.8 Transfer or cancellation of permits. An unexpired building permit may be cancelled or transferred from one party to another upon written application to the Building Official, by the original permittee or owner of the property, provided no inspections have been made and there is no change in the plans and specifications. If any inspections have been completed on the original permit, the new permittee shall pay one-half of a new permit fee. No change will be made in the expiration date of the original permit.

105.8.1 Owner assuming role as contractor. The building official may allow the property owner to assume the role of contractor at any time on an active building permit by providing the Building Official with a letter listing the permit number, the address of the project and stating that the original contractor is no longer in the employ of the owner, provided that no change of ownership has occurred since the permit was issued. This change may be done at no charge. No change will be made in the expiration date of the original building permit.

107.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in two or more sets with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes or policies of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional

107.2.1 Information on construction documents. Add the following sentence:
Unless specifically waived by the Building Official, each submittal shall include a complete code compliance study, clearly indicate the locations of the proposed work and identify the person(s) responsible for the preparation of the submitted plans and specifications.

107.2.2 Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to the Fire District having jurisdiction to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

Add the following section:

107.3.4.1.1 Responsibility for preparation of plans and specifications. In accordance with Section 107.3.4.1 the building official shall require plans, computations, and specifications to be prepared, designed, and stamped by an engineer or architect licensed in the State of Colorado for but not limited to:

1. All foundations
2. Wall or Roof framing, other than standard construction, not conforming to the requirements of Chapters 16 and 23.
3. Complete building plans, including the design for all structural components

108.3 Temporary power. The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the currently adopted version of the National Electrical Code.

Delete Section 109 in its entirety and substitute with the following:

109.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

109.2 Schedule of permit fees.

The fee for each permit shall be based upon Table 1-A and shall be consistent with the current version of the County adopted Fee and Valuation Schedule as determined by the County Commissioners, which may be amended periodically as needed

109.3 Building permit valuations. Permit valuations shall be assessed as per estimated total labor and material valuation, or if applicable and as a minimum, using the current County adopted Fee and Valuation Schedule, which may be amended periodically as needed.

The permit applicant shall provide an estimated total labor and material valuation at time of application. This valuation is for all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment, along with any necessary site work. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. The Building Official may also utilize the Building Valuation Data, periodically published in the ICC Building Safety Journal, as a guide for the determination of the minimum value or valuation under any of the provisions of this Code. The final building permit valuation shall be set by the building official.

109.4 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection with or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

109.4.1 Plan review fee. When documents are required by Section 107.1, a plan review fee shall be charged on all permits. This fee will be required at time of submittal of the documents for plan review. Said plan review fee shall be 65 percent of the building permit fee as shown in Table 1-A.

The plan review fees specified in this section are separate fees from the permit fees specified in Section 109.2 and are in addition to the permit fees.

When submitted documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in Section 107.3.4.2, an additional plan review fee shall be charged at the rate shown in Table 1-A.

109.4.1.1 Expiration of Plan Review. Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the building official. The building official may extend the time for action by the applicant for a period not exceeding 180 days upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application may be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

109.5 Investigation Fee. Any person who commences work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits, or is in violation of the approved plans, or in violation of Section 110.6, shall be subject to an additional fee established by the building official that shall be in addition to the required permit fees. The additional fee shall be equal to the permit fee. An investigation fee shall be collected whether or not a permit is then or subsequently issued.

109.6 Temporary certificate of occupancy. There shall be a fee for a Temporary Certificate of Occupancies as set forth in the County adopted Fee and Valuation Schedule.

109.7 Reinspections. A re-inspection fee may be assessed as per county policy for each inspection or re-inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

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, or for deviating from plans requiring the approval of the building official. A re-inspection fee may be assessed for failure to post a readily visible address. To obtain a Reinspection, the applicant shall pay the Reinspection fee in accordance with Table 1-A.

109.8 Refunds. The building official has the discretion to refund permit fees and plan review fees paid under the following conditions:

1. A written request for a refund of the permit fee or plan review fee must be submitted within 180 days of the date the fee was paid.
2. The written request must set forth the basis for the request for a refund, identify the project for which a refund is requested and the request must be from the same person or entity which paid the fee
3. If the foregoing provisions have been met, the building official may refund permit fees or plan review fees based upon the following criteria:
 - a) If either or both fees were paid or collected in error, the applicable fees paid will be refunded.
 - b) If the project for which a permit fee has been paid is not to be constructed and no construction has commenced, or the request for plan review for such project is being withdrawn before review of the plans has occurred, the applicable fees paid, minus a 20% processing and file preparation charge, will be refunded.
 - c) If the plans for the project have been reviewed to any extent at the time a request for refund is submitted, no refund of plan review fees will be authorized
 - d) If permit fees are paid and any construction has been commenced, no refund will be authorized

TABLE 1-A – BUILDING PERMIT FEES

TOTAL VALUATION	FEE
\$100 TO \$500.00	\$23.50
\$501.00 to \$2,000.00	\$23.50 for the first \$500.00 plus \$3.05 for each additional \$100.00, or fraction thereof, to and including \$2000.00
\$2,001.00 to \$25,000.00	\$69.25 for the first \$2,000.00 plus \$14.00 for each additional \$1,000.00, or fraction thereof, to and including \$25,000.00
\$25,001.00 to \$50,000.00	\$391.25 for the first \$25,000.00 plus \$10.10 for each additional \$1,000.00, or fraction thereof, to and including \$50,000.00
\$50,001.00 to \$100,000.00	\$643.75 for the first \$50,000.00 plus \$7.00 for each additional \$1,000.00, or fraction thereof, to and including \$100,000.00
\$100,001.00 to \$500,000.00	\$993.75 for the first \$100,000.00 plus \$5.60 for each additional \$1,000.00, or fraction thereof, to and including \$500,000.00
\$500,001.00 to \$1,000,000.00	\$3,233.75 for the first \$500,000.00 plus \$4.75 for each additional \$1,000.00, or fraction thereof, to and including \$1,000,000.00
\$1,000,001.00 and up	\$5,608.75 for the first \$1,000,000.00 plus \$3.65 for each additional \$1,000.00 or fraction thereof
Other Inspections and Fee:	
1. Inspections outside of normal business hours.....	\$47.00 per hour ¹
2. Reinspection fees (minimum).....	\$47.00 per hour ¹
3. Inspections – other (minimum charge one-half hour).....	\$47.00 per hour ¹
4. Additional plan review required by changes, additions or revisions to plans.....	\$47.00 per hour ¹
5. For use of outside consultants for plan checking and inspections or both	Actual costs ²

¹ Or the total hourly cost to the jurisdiction, whichever is greatest. This cost shall include supervision, overhead, equipment, hourly wages and fringe benefits of the employees involved.

² Actual costs include administrative and overhead costs.

110.3.1 Footing and foundation inspection. Add the following sentence:
All foundation piers / caissons must be inspected by a Colorado licensed engineer, who must then issue a stamped foundation compliance statement to the County.

110.3.2.1 Building sheathing inspection. A building sheathing inspection shall be made after all sheathing is installed and fastened per approved plans and prior to concealment.

110.3.4 Frame inspection. Change the last word in the paragraph “approved” to inspected.

110.3.7 Energy efficiency inspections. Periodic, partial inspections shall be made to determine compliance with Chapter 13 and shall include, but not be limited to, inspections for: envelope insulation *R* and *U* values, fenestration *U* value, duct system *R* value, and HVAC and water-heating equipment efficiency. A certification affidavit shall be required upon completion of the permitted project and prior to the issuance of any required Certificate of Occupancy. Said affidavit shall provide confirmation of compliance with the submitted design criteria. See Section 101.4.6 Energy.

110.3.8 Other inspections. In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the Building Division.

111.2 Certificate issued. No certificate of occupancy shall be issued unless the project has received all required final inspections, has paid all fees associated with the enforcement of this Code and all fees levied by other County departments and collected or enforced through the enforcement of this Code, and is not currently the subject of any order or directive requiring the Building Official to suspend issuance of a certificate of occupancy. After final inspections, when it is found that the building or structure and building site comply with the provisions of this code and with other conditions and requirements of the County, the Building Official, after review and approval by the Zoning Division and Flood Plain Administrator, shall issue a Certificate of Occupancy which shall contain the following:

1. The building permit number.
2. The address of the structure.
3. The name and address of the owner.
4. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
5. The name of the building official.
6. The edition of the code under which the permit was issued.
7. The use and occupancy, in accordance with the provisions of Chapter 3.
8. The type of construction as defined in Chapter 6.
9. The design occupant load.
10. If an automatic sprinkler system is provided, whether the sprinkler system is required.
11. Any special stipulations and conditions of the building permit. The failure to state conditions or restrictions on the face of the certificate shall not affect the enforceability of any such conditions or restrictions in effect at the time of issuance of the certificate

Delete Section 113 in its entirety and substitute with the following:

**SECTION 113
BOARD OF REVIEW**

113.1 Organization

1. A Board of Review is hereby established, the membership of which shall consist of five (5) members who preferably shall be residents of Arapahoe County and who shall be experienced in building construction. The five regular members and alternate member(s) of the Board of Review shall be appointed by the Board of County Commissioners.
2. The Board of Review shall meet once a year, and at such other times as specified in its rules. The Board of Review, in its rules of procedure, shall make provisions for the selection of a Chairman to preside at its meetings.
3. The Board of County Commissioners shall appoint a Recording Secretary to the Board of Review who shall be the custodian of records and shall conduct official correspondence, prepare the agenda, receive applications and generally supervise the clerical work.
4. The terms of the members of the Board of Review shall be established so that the term of at least one member will expire each year.
5. Vacancies in the membership of the Board of Review shall be filled for the unexpired terms in the same manner as in the case of the original appointments.

113.2 Jurisdiction

1. The Board of Review, in appropriate cases and subject to the appropriate principals, standards, rules, conditions and safeguards set forth in the Building Code adopted by the Board of County Commissioners of Arapahoe County, Colorado, may make special exceptions to the said terms of the Building Code in harmony with their general purpose and intent. Such exceptions may include a determination of suitability of alternate materials, and methods of construction and to provide reasonable interpretations of said Building code. The Board shall have no power to determine, waive, except or otherwise affect the enforcement of other County regulations, resolutions, ordinances or other laws, which are enforced through enforcement of the Building Code.
2. The Board of Review may hear appeals by any person aggrieved by his inability to obtain a building permit to the extent caused by failure to comply with the standards of the Building Code (but not to the extent related to compliance with other County regulation, resolutions or ordinances or other applicable laws) or by any officer, department, board or bureau of the County affected by the grant or refusal of building permit.

3. The Board of Review may hear any appeal by any person, officer, department, board or bureau from the decision of any administrative officer or enforcement of the Building Code adopted by the Board of County Commissioners of Arapahoe County, Colorado.
4. Any such appeal or petition for special exception shall be filed with the Secretary to the Board of Review within thirty (30) days after the date of the decision of the administrative officer. The form and procedure relating thereto shall be specified in the supplemental rules of procedure adopted by the Board of Review.
5. The Board of Review may formulate suggested amendments to the Building Code adopted by the Board of County Commissioners of Arapahoe County and transmit these suggestions to the Board of County Commissioners for its consideration.

113.3 Procedure

1. The Chairman at the meetings of the Board of Review may administer oaths and compel the attendance of witnesses.
2. All meetings of the Board of Review shall be open to the public and the records of its official actions shall be filed in the office of the Recording Secretary to the Board of Review and shall be public records.
3. A quorum of the Board of Review shall not be fewer than four (4) members (regular or alternate).
4. The Board of Review shall adopt supplemental rules of procedure relating to participation of the regular and alternate members of the Board of the meetings. Alternate members may participate at the meeting and vote on the decisions provided that in no case may more than a total of five (5) votes be cast on any question or case before the Board of Review. At least three (3) affirmative votes are necessary to grant an appeal or a special exception

116.1 Conditions. Structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in accordance with the procedures set forth in the 1997 Uniform Code for the Abatement of Dangerous Buildings. A vacant structure that is not secured against entry shall be deemed unsafe.

116.1.1 Dangerous Building Code amendments. Add this new subsection:

Chapters 1, 2, 3 and 4 of The 1997 Uniform Code for Abatement of Dangerous Buildings, with the following amendments are to be adopted as the Arapahoe County Dangerous Building Code:

- a) All reference to the Housing Code or Uniform Housing Code are deleted.

- b) Section 205 is deleted.
- c) All references to “Board of Appeals” are replaced with a reference to “Board of Review.”
- d) Section 202 is amended to read as follows: All buildings or portions thereof which are determined after inspection to be dangerous buildings shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures specified in Section 401 of this code.
- e) The Notice posted on the exits of the building as set forth in Section 404(a) shall read:

DO NOT ENTER
UNSAFE TO OCCUPY

It is a violation of the Arapahoe County Building Code to occupy this building or remove or deface this Notice.

Building Official
County of Arapahoe

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies, in accordance with the definitions provided in the current version of Merriam-Webster’s Dictionary

406.1.4 Separation. Amend this subsection as follows:

2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage shall be constructed of a minimum 0.019-inch (0.48 mm) sheet steel and shall have no openings into the garage. Other openings must be of approved materials or be provided with adequate protection, so as to maintain the integrity of the gypsum separation.

Amend Section 1608.2 to read as follows:

1608.2 Ground snow loads. The ground snow load shall be 30 psf. The design roof snow load shall be no less than 30 psf (non-reducible) at any element of the roof.

Amend Section 1609.3 to read as follows: (The balance of the section remains unchanged)

1609.3 Basic wind speed. The basic wind speed, in mph, for the determination of the wind loads shall be determined by Figure 1609, and for Arapahoe County, shall not be less than 90 mph (3 second gust). Basic wind speed increases for the special wind regions indicated, near mountainous terrain and near gorges shall be as deemed appropriate by the design professional. Basic wind speeds determined by the local jurisdiction shall be in accordance with Section 6.5.4 of ASCE 7.

Add new subsections:

2111.1.1 Fireplaces Per State statute, effective January 1, 1993 - No person shall install or construct any new or used fireplace unless it complies with the requirements of the State Air Quality Control Commission (AQCC). Every person who installs or constructs any fireplace shall provide evidence satisfactory to the Building Official that the fireplace and installation have been certified by the Air Quality Control Commission. The required evidence will include

display of the emission certification label on the fireplace. No installation of site-built or manufactured fireplaces shall be approved until after inspection by the Building Official or his appointed representative

2111.14. Fireplaces Per State statute, effective January 1, 1993 - No person shall install or construct any new or used factory fireplace unless the device complies with the requirements of the State Air Quality Control Commission (AQCC). Every person who installs or constructs any factory fireplace shall provide evidence satisfactory to the Building Official that the fireplace and installation have been certified by the Air Quality Control Commission. The required evidence will include display of the emission certification label on the fireplace.

Table 2902.1 Plumbing Systems. Revise footnote (f) to read: “Drinking fountains and service sinks are not required for an occupant load of 15 or fewer”

The following appendix chapters of the International Building Code are hereby specifically adopted:

APPENDIX C AGRICULTURAL BUILDINGS

International Residential Code

R101.1 Title. These provisions shall be known as the Residential Code of Arapahoe County and shall be cited as such and will be referred to herein as “this code”.

R101.2 Scope. The provisions of the this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures.

R101.2.1 Standards. Whenever any State law or regulation imposes higher standards than are required by this Code, the provisions of that laws or regulation shall govern. Whenever the standards imposed by this Code are higher than the standards imposed by any other law or regulation or resolution of any governmental body, then the standards of this Code shall govern

R102.4 Referenced codes and standards. The codes when adopted by resolution and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

All references within this code to flooding, flood plains, flood remediation and administration are secondary to the County Flood Plain Regulations, but may be used by the Building Official as guidelines with approval of the Flood Plain Administrator.

In all cases where the International Fire Code is mentioned, the Building Official may use this document as a reference, but in no case should it be construed to imply that these codes have been adopted in any form

R102.5 Appendices. Provisions in the appendices shall not apply unless specifically referenced in the adopting resolution, but may be used as a reference and for code compliance guidance.

R102.7 Existing structures. The legal occupancy of any structure 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 1997 Uniform Code for the Abatement of Dangerous Buildings as amended and included below or the *International Fire Code* as applicable, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

Chapters 1, 2, 3 and 4 of The 1997 Uniform Code for Abatement of Dangerous Buildings, with the following amendments are to be adopted as the Arapahoe County Dangerous Building Code:

- f) All reference to the Housing Code or Uniform Housing Code are deleted.
- g) Section 205 is deleted.
- h) All references to “Board of Appeals” are replaced with a reference to “Board of Review.”
- i) Section 202 is amended to read as follows: All buildings or portions thereof which are determined after inspection to be dangerous buildings shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures specified in Section 401 of this code.
- j) The Notice posted on the exits of the building as set forth in Section 404(a) shall read:

DO NOT ENTER
UNSAFE TO OCCUPY

It is a violation of the Arapahoe County Building Code to occupy this building or remove or deface this Notice.

Building Official
County of Arapahoe

SECTION R103
BUILDING DIVISION

Refer to Section 103 of the amended (IBC) Building Code of Arapahoe County for requirements of this section, to become new subsections R103.1 through R103.3.

R104.10 Modifications. Change the last (4) words in the paragraph to Building Division.

R104.10.1 Areas prone to flooding. The building official shall not grant modifications to any provision related to areas prone to flooding without the expressed written approval from the Flood Plain Administrator.

R104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit

any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction for a specific permit may be approved on a case-by-case basis where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the limited purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. This Section does not give the building official the authority to allow the usage of alternative material design and methods of construction on an ongoing basis

R105.2 Work exempt from permit

(Add the following to the first paragraph, and except for the modifications to Building Item 1 as shown below, and the removal of Item 10, the remainder of the section is unchanged)

Work exempted from requiring any type of construction permit does not preclude any required approval from the Planning and Zoning Departments. Unless otherwise exempted by this Code, separate plumbing, electrical, and mechanical permits will be required for any exempted items.

R105.2 Building:

Item 1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.

Item 10 – Deleted

R105.3 Application for permit. To obtain a permit, the applicant shall first file an application there for in writing on a form furnished by the Building Division for that purpose.

(The remainder of this section remains unchanged)

R105.3.1 Action on application. The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing.

R105.3.1.1 Issuance. The application, plans and specifications, and other data as requested by the Building Official, Zoning Administrator or the Public Works and Development director (the “supporting data”), filed by the applicant for a permit shall be reviewed by the Building Official, who shall confirm whether the data meets the technical requirements of this Code as well as whether the property is eligible for permit issuance. The application and other data shall also be reviewed for compliance with other County rules, regulations, resolutions and standards, including those described below. If the Building Official finds that the work described in an application for a permit and the supporting data conforms to the requirements of this Code and the other applicable rules, regulations, resolutions and standards, and that the fees specified in Section 108 have been paid, the Official shall issue a permit to the applicant. The property for which the applicant seeks a permit must be eligible for permit issuance. Eligibility exists if the property meets the following standards:

- e) The property has proper zoning for the improvements described in the application and supporting data, and the proposed improvements, when built and occupied in accordance with their expected use, will comply with all applicable zoning standards, including setbacks,

restrictions and conditions.

- f) The applicant has received approval, when required, from the County's Floodplain Administrator, related to compliance with the County's Floodplain Regulations.
- g) The grading and drainage proposed for the property following completion of the Project complies with the development plan for the site and applicable County stormwater management and grading regulations.
- h) Taxes for the property are current and not delinquent.

Acceptance of a permit constitutes the agreement by the property owner and the applicant to continue to comply with the Code, the County's Flood plain Regulations, the conditions set forth on the plat and the development plan for the property, the County's grading, erosion and sediment control requirements, the subdivision, and stormwater management regulations, and all applicable zoning regulations. The applicant and owner further agree that the Building Official shall have the power to suspend, revoke or cancel any permit if at any time the Building Official or his/her designee observes or is informed by other County personnel of violations of any of the above regulations (or other applicable regulations, resolutions or laws) on the property or caused by the applicant or owner on or near the property. Applicant and owner further agree that the Building official's power with respect to permits shall include the power to refuse inspections, the power to refuse to issue and the power to revoke certificates of occupancy. Persons may appeal an erroneous decision of the Building Official refusing to issue, attaching conditions to issuance, or the suspension, revocation or cancellation of a permit or certificate of occupancy to the Board of County Commissioners or its designee stating the reason that the decision was erroneous. The appeal shall be in writing and shall attach all supporting documentation, and shall be filed within twenty calendar days of the date of the decision. After an investigation of the appeal by staff for the Board, the Board shall review the decision of the Building Official for compliance with the requirements of the Building Code and such other County regulations, resolutions or ordinances. The Board may take action reversing the decision in whole or part, within thirty days of receipt of receipt of the appeal. If not reversed, in whole or part, within thirty days of receipt of the appeal if not reversed, in whole or part, within the above time periods, the decision of the Building Official shall be final

R105.5 Expiration. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended, abandoned or if no County inspections have been performed for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. The fee for an extension shall be one-half the amount required for a new permit for such work

R105.7 Placement of permit. The building permit ~~or copy thereof~~ shall be kept on the site of the work until the completion of the project.

R106.1 Submittal documents. Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes or policies of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Add new subsection:

R106.1.1.1 Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this Code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves, or parapets, means of drainage, water-resistive membrane, and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system, which was tested, where applicable, as well as the test procedure used.

Add new subsection:

R106.3.4 Design Professional Required. When it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The building official shall require plans, computations, and specifications to be prepared, designed, and stamped by an engineer or architect licensed in the State of Colorado for, but not limited to:

1. All foundations except for detached accessory structures with a County compliant monoslab not greater than 1000 square feet.
2. Wall or Roof framing, other than standard construction, not conforming to the requirements of Chapters 6 and 8.
3. Metal buildings and structures.
4. Log structures

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

Where structural observation is required by Section 1710 of the 2009 International Building Code, such structural observations shall be required under this code, the inspection report shall name the individual or firms who are to perform structural observation and describe the stages of

the 2009 International Building Code are also incorporated into this Code

R107.3 Temporary power. The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the most current adopted version National Electrical Code.

SECTION R108 FEES

Refer to Section 109 of the amended (IBC) Building Code of Arapahoe County for requirements of this section, to become new subsections R108.1 through R108.8.

R109.1 Types of Inspections. Add the following paragraph to the current existing paragraph. Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this Code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this Code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection

R109.1.1 Foundation inspection. Add the following sentence

All foundation piers / caissons must be inspected by a Colorado licensed engineer, who must then issue a foundation compliance statement to the County

R109.1.4 Frame and masonry inspection. Change the last word in the paragraph “approved” to inspected.

Add the following new sub-section.

R109.1.4.1 Building sheathing inspection. A building sheathing inspection shall be made after all sheathing is installed and fastened per approved plans and prior to concealment.

Add new subsection:

R109.3.1 Special inspections. For special inspections possibly required, see Section 1704 of the 2009 International Building Code

R110.3 Certificate issued. No certificate of occupancy shall be issued unless the project has received all required final inspections, has paid all fees associated with the enforcement of this Code and all fees levied by other County departments and collected or enforced through the enforcement of this Code, and is not currently the subject of any order or directive requiring the Building Official to suspend issuance of a certificate of occupancy. After final inspections, when it is found that the building or structure and building site comply with the provisions of this code

approval by the Zoning Division and to the extent not objected to be the County’s Department of Highways/Engineering, shall issue a Certificate of Occupancy which shall contain the following:

1. The building permit number.
2. The address of the structure.
3. The name and address of the owner.
4. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
5. The name of the building official.
6. The edition of the code under which the permit was issued.
7. If an automatic sprinkler system is provided.
8. Any special stipulations and conditions of the building permit. The failure to state conditions or restrictions on the face of the certificate shall not affect the enforceability of any such conditions or restrictions in effect at the time of issuance of the certificate

SECTION R112
BOARD OF REVIEW

Refer to Section 113 of the amended (IBC) Building Code of Arapahoe County for requirements of this section, to become new subsections R112.1 through R112.3.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies, in accordance with the definitions provided in the current version of Merriam-Webster’s Dictionary

Section 202 – Definitions. UNUSUALLY TIGHT CONSTRUCTION.

Construction meeting the following requirements:

1. Walls exposed to the outdoor atmosphere having a continuous water vapor retarder with a rating of 1 perm [57 ng/ (s • m² • Pa)] or less with openings gasketed or sealed;
2. Openable windows and doors meeting the air leakage requirements of the *International Energy Conservation Code*, Section 402.4.2; and
3. Caulking or sealants are applied to areas, such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

TABLE R301.2(1)

Ground Snow Load	Wind Design		Seismic Design Category	Subject to damage from			Winter Design Temp	Ice Barrier Underlayment required	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed MPH	Topographic Effects		Weathering	Frost Line depth	Termite					
30 # Roof 30# non-reducible	90 mph 3 second gust	No	B	Severe	36” inches	Slight to moderate	1 degree F	No	1989 FIRM: 1995	712	50.3 F

TABLE R302.1

Add the following subsection:

R302.1.1 Amendment. Building permits issued for platted lots with Final Development Plan approval prior to the adoption of Table R302.1 in the 2006 IRC effective 1/1/2008 will be permitted to continue to conform to the fire separation distance requirements for exterior walls and projections as listed in Section R302.1 of the 2003 IRC.

R302.2 Townhouses. Delete the Exception and substitute as follows:

Exception: A common 2-hour fire-resistance-rated wall is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. Electrical installations shall be installed in accordance with Chapters 35 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section 302.4.

Delete Section R302.3 in its entirety and substitute as follows:

R302.3 Two Family Dwellings. Dwelling units in two-family dwellings shall be separated from each other by fire-resistance-rated walls identical to those separating townhouses in R302.2 through R302.4 and/or floor-ceiling assemblies having not less than a 1-hour fire-resistance rating when tested in accordance with ASTM E 119 or UL 263. Fire-resistance-rated floor-ceiling assemblies shall extend to and be tight against the exterior wall

R302.5.1 Opening protection: Add the following third sentence to the existing paragraph:
Doors shall be self-closing and self-latching.

SECTION R305 CEILING HEIGHT

R305.1 Minimum height. Habitable spaces, hallways, bathrooms, toilet rooms, laundry rooms and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm). The required height shall be measured from the finish floor to the lowest projection from the ceiling.

Exceptions:

1. For rooms with sloped ceilings, at least 50 percent of the required floor area of the room must have a ceiling height of at least 7 feet (2134 mm) and no portion of the required floor area may have a ceiling height of less than 5 feet (1524 mm).
2. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) at the center of the front clearance area for fixtures as shown in Figure R307.1. The ceiling height above fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.
3. Beams and girders spaced not less than 4 feet on center may project not more than 6 inches below the required ceiling height.
4. Ceilings in basements without habitable spaces may project to within 7 feet, 2 inches of the finished floor; and beams, girders, ducts or other obstructions may project to within 6 feet, 8 inches of the finished floor.

5. Habitable spaces in basements shall have a ceiling height of not less than seven (7) feet. Said ceiling height may be reduced from 7 feet to 6 feet 6 inches under beams, ducts and piping provided, however, that the reduced ceiling height is necessary solely for the furring and for concealing of said beams, ducts and piping. The reduced ceiling height shall not exceed 8 feet in width in any one-room area and no protrusions shall be allowed below this area.

Section R313 is deleted in its entirety

R315.1 Carbon monoxide alarms – Substitute the following for the existing paragraph, to comply with State Statutes.

Notwithstanding any other provision of law, the seller of each existing single-family dwelling offered for sale or transfer on or after July 1, 2009, that has a fuel-fired heater or appliance, a fireplace, or an attached garage shall assure that an operational carbon monoxide alarm is installed within fifteen feet of the entrance to each room lawfully used for sleeping purposes or in a location as specified in any building code adopted by the state or any local government entity.

R315.2 Where required in existing dwellings

Notwithstanding any other provision of law, every single-family dwelling that includes either fuel-fired appliances or an attached garage where, on or after July 1, 2009, interior alterations, repairs, fuel-fired appliance replacements, or additions, any of which require a building permit, occurs or where one or more rooms lawfully used for sleeping purposes are added shall have an operational carbon monoxide alarm installed within fifteen feet of the entrance to each room lawfully used for sleeping purposes or in a location as specified in any building code adopted by the state or any local government entity.

R903.2.1 Locations. Flashings shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction and around roof openings, and shall include dripedge at all eaves, rakes and soffit locations. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inch (0.5 mm) (No. 26 galvanized sheet).

R1003.1.1 Fireplaces Per State statute, effective January 1, 1993 - No person shall install or construct any new or used fireplace unless it complies with the requirements of the State Air Quality Control Commission (AQCC). Every person who installs or constructs any fireplace shall provide evidence satisfactory to the Building Official that the fireplace and installation have been certified by the Air Quality Control Commission. The required evidence will include display of the emission certification label on the fireplace. No installation of site-built or manufactured fireplaces shall be approved until after inspection by the Building Official or his appointed representative

R1004.1.1 Fireplaces Per State statute, effective January 1, 1993 - No person shall install or construct any new or used factory fireplace unless the device complies with the requirements of the State Air Quality Control Commission (AQCC). Every person who installs or constructs any factory fireplace shall provide evidence satisfactory to the Building Official that the fireplace and installation have been certified by the Air Quality Control Commission. The required evidence will include display of the emission certification label on the fireplace.

M1503.1.1 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

M1503.1.2 Protection required. Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the kitchen exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than 1 1/2 inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be constructed of steel, have a thickness of 0.062 inch (1.6 mm) and extend a minimum of 2 inches (51 mm) above sole plates and below top plates.

M2101.10 Tests. Hydronic piping systems other than ground source heat pump loop systems shall be tested hydrostatically at a pressure of not less 100 psi (689 kPa). The duration of each test shall be not less than 15 minutes, or for listed piping systems of other than metallic pipe, the testing shall be per the manufacturer's instructions. Ground-source heat pump loop systems shall be tested in accordance with Section M2105

G 2407.5 (304.5) Indoor combustion air. Combustion and dilution air shall be permitted to be obtained entirely from the indoors in buildings that are not of unusually tight construction. The required volume of indoor air shall be determined in accordance with Section G2407.5.1 (304.5.1) or G2407.5.2 (304.5.2), except that where the air infiltration rate is known to be less than 0.40 air changes per hour (ACH), Section 304.5.2 shall be used. The total required volume shall be the sum of the required volume calculated for all appliances located within the space. Rooms communicating directly with the space in which the appliances are installed through openings not furnished with doors, and through combustion air openings sized and located in accordance with Section G2407.5.3 (304.5.3), are considered to be part of the required volume.

G2415.10 (404.10) Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches below grade, ~~except as provided for in Section G2415.10.1.~~

G2415.10.1 (404.10.1) Individual outside appliances. Delete this section – see Section G2415.10 for minimum burial depth

P2603.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches below grade

P2903.5 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor may be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with the manufacturer's specifications. Water-hammer arrestors shall conform to ASSE 1010.

P3103.1 Roof extension. Open vent pipes that extend through a roof shall be terminated at least 12 inches (152 mm) above the roof or 12 inches above the anticipated snow accumulation,

whichever is greater, 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 above the roof.

P3201.2 Trap seals and trap seal protection. Modify the second sentence as follows: Traps for floor drains shall be fitted with a trap primer or other approved method of protection, or shall be of the deep seal design.

The following appendix chapters of the International Residential Code are hereby specifically adopted:

APPENDIX G SWIMMING POOLS, SPAS AND HOT TUBS

APPENDIX H PATIO COVERS

International Mechanical Code

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

102.8 Referenced codes and standards. The codes when adopted by resolution and standards referenced herein shall be those that are listed in Chapter 15 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever any State law or regulation imposes higher standards than are required by this Code, the provisions of that law or regulation shall govern. Whenever the standards imposed by this Code are higher than the standards imposed by any other law or regulation or resolution of any governmental body, then the standards of this Code shall govern.

SECTION 103
BUILDING DIVISION

103.1 Creation of enforcement agency. The Building Division is hereby created and the official in charge thereof shall be known as the building official.

103.2 Appointment. The building official shall be appointed by the Public Works and Development Director or Board of County Commissioners.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the Arapahoe County Board of Commissioners, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

105.1 Modifications. Change the last (3) words of this section to Building Division.

105.2 Alternative materials, methods, equipment and appliances.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction for a specific permit may be approved on a case-by-case basis where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the limited purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. This Section does not give the building official the authority to allow the usage of alternative material design and methods of construction on an ongoing basis

106.3.1 Construction documents. Construction documents, engineering calculations, diagrams and other data shall be submitted in two or more sets with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law or jurisdictional policies. Where special conditions exist, the code official is authorized to require additional construction documents to be prepared by a registered design professional.

Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire-resistance rating and fire blocking

106.4.3 Expiration. Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended, abandoned, or if no County inspections have been performed at any time after the work is commenced for a period of 180 days. Before such work recommences, a new permit shall be first obtained and the fee, therefore, shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year.

**SECTION 106.5 – Delete in its entirety
FEES**

Refer to Section 109 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IMC subsections 106.5.1 through 106.5.8.

107.1.1 Approved inspection agencies. The code official may accept reports of approved agencies, provided that such agencies satisfy the requirements as to qualifications and reliability.

108.4 Violation penalties. Persons 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 or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a

permit or certificate issued under the provisions of this code, shall be in violation of State statutes and shall be subject to penalties as prescribed by law.

108.5 Stop work orders. Upon notice from the code official that mechanical work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

SECTION 109 – Delete in its entirety BOARD OF REVIEW

Refer to Section 113 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IMC subsections 109.1 through 109.3.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies, in accordance with the definitions provided in the current version Merriam-Webster's Dictionary

Add the following definition:

Section 202 Definitions. UNUSUALLY TIGHT CONSTRUCTION.

Construction meeting the following requirements:

1. Walls exposed to the outdoor atmosphere having a continuous water vapor retarder with a rating of 1 perm [57 ng/ (s • m² • Pa)] or less with openings gasketed or sealed;
2. Openable windows and doors meeting the air leakage requirements of the *International Energy Conservation Code*, Section 402.4.2; and
3. Caulking or sealants are applied to areas, such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

403.3 Outdoor airflow rate. Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with this section. The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 403.3. Ventilation rates for occupancies not represented in Table 403.3 shall be those for a listed occupancy classification that is most similar in terms of occupant density, activities and building construction; or shall be determined by an approved engineering analysis, including, but not limited to, ASHRAE 62.4. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of the code. With the exception of smoking lounges, the ventilation rates in Table 403.3 are based on the absence of smoking in occupiable spaces. Where smoking is anticipated in a space other than a smoking lounge, the ventilation system serving the space shall

be designed to provide ventilation over and above that required by Table 403.3 in accordance with accepted engineering practice, including, but not limited to ASHRAE 62.4.

Add the following sub-sections for code to code consistency:

505.1.1 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

505.1.2 Protection required. Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the kitchen exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than 1 1/2 inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be constructed of steel, have a thickness of 0.062 inch (1.6 mm) and extend a minimum of 2 inches (51 mm) above sole plates and below top plates.

506.3.2.5 Grease duct test.

Substitute 500 watts for the 100 watts listed in sentence 5 of this section.

1001.1 Scope

Amend exception 7 to read:

7. Any boiler or pressure vessel subject to inspection by federal or state inspectors, the requirements of Colorado Division of Oil and Public safety shall also apply

1208.1 General. Hydronic piping systems other than ground source heat pump loop systems shall be tested hydrostatically at one and one half times the maximum system design pressure, but not less than 100 psi (689 kPa). The duration of each test shall be not less than 15 minutes, or for listed piping systems of other than metallic pipe, the testing shall be per the manufacturer's instructions. Ground-source heat pump loop systems shall be tested in accordance with Section 1208.1.1

International Plumbing Code

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

101.2 Scope. Modify the last sentence of the section to read:

Provisions in the appendices shall not apply unless specifically adopted, but may be used as a referenced or enforcement of other code sections.

102.8 Referenced codes and standards. The codes when adopted by resolution and standards referenced in this code shall be those that are listed in Chapter 13 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where the differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements. Whenever any State

laws or regulation shall govern. Whenever the standards imposed by this Code are higher than the standards imposed by any other law or regulation or resolution of any governmental body, then the standards of this Code shall govern. The provisions of the International Plumbing Code along with all applicable State amendments or regulations shall apply to all aforementioned installation, alteration, repair and replacement of plumbing systems.

SECTION 103 BUILDING DIVISION

103.1 Creation of enforcement agency. The Building Division is hereby created and the official in charge thereof shall be known as the building official.

103.2 Appointment. The building official shall be appointed by the Public Works and Development Director or Board of County Commissioners.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the Arapahoe County Board of Commissioners, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

105.1 Modifications. Delete the last (3) words of this paragraph and insert Building Division.

105.2 Alternative materials, methods and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction for a specific permit may be approved on a case-by-case basis where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the limited purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. This Section does not give the building official the authority to allow the usage of alternative material design and methods of construction on an ongoing basis

106.3.1 Construction documents. Construction documents, engineering calculations, diagrams and other such data shall be submitted in two or more sets with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law or jurisdictional policies. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall indicate where penetrations will be made for pipe, fittings and components and shall indicate the materials and methods for maintaining required structural safety, fire-resistance rating and fire blocking.

106.5.3 Expiration. Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended, abandoned or if no County inspections have been performed at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, a new permit shall be first obtained and the fee there for shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded 1 year.

**SECTION 106.6 – Delete in its entirety
FEES**

Refer to Section 109 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IPC subsections 106.6.1 through 106.6.8.

108.4 Violation penalties. Any person 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 or repair plumbing work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be in violation of State statutes and shall be subject to penalties as prescribed by law.

108.5 Stop work orders. Upon notice from the code official, work on any plumbing system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner’s agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**SECTION 109 – Delete in its entirety
BOARD OF REVIEW**

Refer to Section 113 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IPC subsections 109.1 through 109.3.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies, in accordance with the definitions provided in the current version of Merriam-Webster’s Dictionary

305.6.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum 12 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches below grade.

Table 403.1 Minimum Number of Required Plumbing Fixtures. Revise footnote (f) to read: “Drinking fountains and service sinks are not required for an occupant load of 15 or fewer”

604.9 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor may be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with the manufacturer’s specifications. Water-hammer arrestors shall conform to ASSE 1010.

608.17 Protection of individual water supplies. Delete – wells are regulated by the State.

904.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least 12 inches above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet above the roof.

International Fuel Gas Code

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

102.8 Referenced codes and standards. The codes when adopted by resolution and standards referenced in this code shall be those that are listed in Chapter 8 and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever any State law or regulation imposes higher standards than are required by this Code, the provisions of that laws or regulation shall govern. Whenever the standards imposed by this Code are higher than the standards imposed by any other law or regulation or resolution of any governmental body, then the standards of this Code shall govern. (The remainder of this section remains unchanged)

SECTION 103 (IFGC) BUILDING DIVISION

103.1 Creation of enforcement agency. The Building Division is hereby created and the official in charge thereof shall be known as the building official.

103.2 Appointment. The building official shall be appointed by the Public Works and Development Director or Board of County Commissioners.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the Arapahoe County Board of Commissioners, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

104.8 Department records. The code official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and

orders issued. Such records shall be retained in the official records for the period required for the retention of public records.

105.1 Modifications. Delete the last (3) works of this section and insert Building Division.

105.2 Alternative materials, methods and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction for a specific permit may be approved on a case-by-case basis where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the limited purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. This Section does not give the building official the authority to allow the usage of alternative material design and methods of construction on an ongoing basis

SECTION 106 (IFGC) PERMITS

106.1 When required - Exception

Substitute Building Division for Department of Inspection.

106.3.1 Construction documents. Construction documents, engineering calculations, diagrams and other data shall be submitted in two or more sets with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law or jurisdictional policies. (The remainder of this section remains unchanged)

106.5.3 Expiration. Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or is suspended or abandoned or if no County inspections have been performed at any time after the work is commenced for a period of 180 days. Before such work recommences, a new permit shall be first obtained and the fee therefor shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original construction documents for such work, and further that such suspension or abandonment has not exceeded one year.

SECTION 106.6 – Delete in its entirety FEES

Refer to Section 109 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IFGC subsections 106.6.1 through 106.6.8.

107.1.1 Approved inspection agencies. The code official may accept reports of approved agencies, provided that such agencies satisfy the requirements as to qualifications and reliability.

108.4 Violation penalties. Persons who shall violate a provision of this code, fail to comply with any of the requirements thereof or erect, install, alter or repair work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be in violation of State statutes and shall be subject to penalties as prescribed by law.

108.5 Stop work orders. Upon notice from the code official that work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, the owner's agent, or the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**SECTION 109 (IFGC) – Delete in its entirety
BOARD OF REVIEW**

Refer to Section 113 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IFGC subsections 109.1 through 109.3.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies, in accordance with the definitions provided in the current version of Merriam-Webster's Dictionary

Section 202 – Definitions. UNUSUALLY TIGHT CONSTRUCTION.

Construction meeting the following requirements:

1. Walls exposed to the outdoor atmosphere having a continuous water vapor retarder with a rating of 1 perm [57 ng/ (s • m² • Pa)] or less with openings gasketed or sealed;
2. Openable windows and doors meeting the air leakage requirements of the *International Energy Conservation Code*, Section 402.4.2; and
3. Caulking or sealants are applied to areas, such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines and at other openings.

304.5 Indoor combustion air. Combustion and dilution air shall be permitted to be obtained entirely from the indoors in buildings that are not of unusually tight construction. The required volume of indoor air shall be determined in accordance with Section 304.5.1 or 304.5.2, except that where the air infiltration rate is known to be less than 0.40 air changes per hour (ACH), Section 304.5.2 shall be used. The total required volume shall be the sum of the required volume calculated for all appliances located within the space. Rooms communicating directly with the space in which the appliances are installed through openings not furnished with doors, and through combustion air openings sized and located in accordance with Section 304.5.3, are considered to be part of the required volume.

404.10 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches below grade, ~~except as provided for in Section 404.10.1.~~

404.10.1 Individual outside appliances – Delete this section – see Section 404.10 for minimum burial depth.

International Energy Conservation Code

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

SECTION 107 – Delete in its entirety FEES

Refer to Section 109 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IECC subsections 107.1 through 107.8.

108.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

SECTION 109 (IECC) – Delete in its entirety BOARD OF REVIEW

Refer to Section 113 of the amended (IBC) Building Code of Arapahoe County for requirements of this section; to become new IECC subsections 109.1 through 109.3.