

# ARAPAHOE COUNTY PROPOSED CODE AMENDMENTS

The following are the proposed amendments, for inclusion in the adoption of the International Codes as identified herein, to become part of the Arapahoe County Building Code. Now that direction has been received from the Board of County Commissioners on several key code issues, the County is seeking input from any affected party, for consideration prior to starting the formal code adoption process, starting as of June 1<sup>st</sup>, 2016.

Any comments may be forwarded directly to Steve Byer, Building Division Manager for Arapahoe County, at the following address or email address:

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The Board of County Commissioners of Arapahoe County hereby propose to adopt the 2015 editions of the International Building Code, International Residential Code, International Plumbing Code, International Mechanical Code, International Fuel Gas Code, International Existing Building Code, International Swimming Pool and Spa Code, and the 2009 edition of the International Energy Conservation Code, all with applicable amendments and to include errata posted as of 12/15/2015, the A117.1-2009 ANSI as a reference, along with the previously adopted ASME A17.1 – 2013, A17.3 – 2005, A18.1 – 2011 and ASCE 21 Parts 1, 2, 3, and 4, Elevator and Escalator Codes, for incorporation into the Arapahoe County Building Code. Said adoption and implementation shall become effective as of July 1<sup>st</sup>, 2016 (proposed date only). Additionally, Table 1-A is hereby adopted for incorporation into the County Fee and Valuation Schedule. The 2014 (NEC) National Electrical Code was already adopted by Resolution 140608 on September 1, 2014, and is part of the Arapahoe County Building Code

Appendix R – Regulations Governing Access & Driveways, previously adopted as part of the International Residential Code by Resolution 120588 shall also be included as part of the Arapahoe County Building Code. (This is NOT Appendix R from the 2015 IRC)

The amendments (underlined areas) to the text of the 2015 International Codes are to be adopted and will include the following modifications, additions and substitutions:

The following 2015 Codes referenced within the aforementioned codes are **not** being adopted:

- International Private Sewage Disposal Code
- International Property Maintenance Code
- International Fire Code
- ICC Electrical Code
- International Zoning Code
- International Urban-Wildland Interface Code

## International Building Code (IBC)

**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 as a referenced or enforcement of other code sections.

**101.4 Referenced codes** Delete existing section 101.4.4 (Property Maintenance Code), adding Electrical as section 101.4.4. All further references in this code to the Property Maintenance Code shall be ignored and not apply.

**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 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.

**101.4.5 Fire prevention.** This section shall remain unchanged, except to add the following at the end of this section. The provisions of the International 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.

**101.4.6 Energy.** The provisions of the (2009 edition) International Energy Code shall apply to matters governing the design and construction of buildings of energy efficiency

**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 and as further regulated in Sections 102.4.1 and 102.4.2.

### **Add the following as part of this section**

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.

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.

**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. Code official and building official shall be equivalent and interchangeable terms.

**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 read 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, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. This Section does not give the building official the authority to allow the usage of the alternative material design and methods of construction on an ongoing basis.

**105.2 Work exempt from permit.** Exemptions from 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. 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

**105.2 Building:** Modify Building: Item 1 and Item 13 as shown below, all else remains unchanged

**Item 1.** One-story detached accessory residential storage sheds, playhouses, shade structures and similar uses, provided the floor area is not greater than 120 square feet, and is not used for the storage of vehicles.

**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 therefor in writing on a form furnished by the Building Division for that purpose. Such application shall: (The remainder of this section 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. (Delete remainder of paragraph)

**Add new sub-section**

**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 109 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 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.

**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~~ 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

**Add the following section:**

**107.1.1 Responsibility for preparation of plans and specifications.** 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. This requirement shall apply to submittals which include, but not be 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, confirmation of beam sizes and spans, loading, or any structural element affecting the integrity of the building.

**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.

**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 NFPA 70 and 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 final building permit valuation shall be set by the building official. The Building Official may also utilize Valuation Data periodically published by the International Code Council as a guide for the determination of the minimum value or valuation under any of the provisions of this Code based upon the published adjusted annual average cost of construction.

**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 107.3.4.1, 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 Re-inspections.** 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 re-inspection, the applicant shall pay the re-inspection 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**

<b>TOTAL VALUATION</b>	<b>FEE</b>
\$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
<b>Other Inspections and Fee:</b>	
1. Inspections outside of normal business hours.....	\$47.00 per hour <sup>1</sup>
2. Reinspection fees (minimum).....	\$47.00 per hour <sup>1</sup>
3. Inspections – other (minimum charge one-half hour).....	\$47.00 per hour <sup>1</sup>
4. Additional plan review required by changes, additions or revisions to plans.....	\$47.00 per hour <sup>1</sup>
5. For use of outside consultants for plan checking and inspections or both.....	Actual costs <sup>2</sup>

<sup>1</sup> 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.

<sup>2</sup> 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.

**Add new sub-section**

**110.3.2.1 Building sheathing / shear wall inspection.** A building sheathing / shear wall 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 in Sections 110.3.1 through 110.3.7, 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 or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. 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.
6. The name of the building official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy, in accordance with the provisions of Chapter 3.
9. The type of construction as defined in Chapter 6.
10. The design occupant load.
11. If an automatic sprinkler system is provided.
12. 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

## **SECTION 116 UNSAFE STRUCTURES AND EQUIPMENT**

**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 that 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 this section. A vacant structure that is not secured against entry shall be deemed unsafe.

1. Whenever any door, aisle, passageway, stairway or other means of exit is not of sufficient width or size or is not so arranged as to provide safe and adequate means of exit in case of fire or panic.
2. Whenever the walking surface of any aisle, passageway, stairway or other means of exit is so warped, worn, loose, torn or otherwise unsafe as to not provide safe and adequate means of exit in case of fire or panic.
3. Whenever any portion thereof has been damaged by fire, earthquake, wind, flood or by any other cause, to such an extent that the structural strength or stability thereof is materially less than it was before such catastrophe and is less than the minimum requirements of the Building Code in place at the time of construction of the buildings.
4. Whenever any portion or member or appurtenance thereof is likely to fail, or to become detached or dislodged, or to collapse and thereby injure persons or damage property.

5. Whenever any portion thereof has wracked, warped, buckled or settled to such an extent that walls or other structural portions have materially less resistance to winds or earthquakes than is required in the case of similar new construction.

6. Whenever the building or structure, or any portion thereof, because of (i) dilapidation, deterioration or decay; (ii) faulty construction; (iii) the removal, movement or instability of any portion of the ground necessary for the purpose of supporting such building; (iv) the deterioration, decay or inadequacy of its foundation; or (v) any other cause, is likely to partially or completely collapse.

7. Whenever, for any reason, the building or structure, or any portion thereof, is manifestly unsafe for the purpose for which it is being used.

8. Whenever the exterior walls or other vertical structural members list, lean or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.

9. Whenever the building or structure has been so damaged by fire, wind, earthquake or flood, or has become so dilapidated or deteriorated as to become (i) an attractive nuisance to children; (ii) a harbor for vagrants, criminals or immoral persons; or as to (iii) enable persons to resort thereto for the purpose of committing unlawful or immoral acts.

10. Whenever any building or structure has been constructed, exists or is maintained in violation of any specific requirement or prohibition applicable to such building or structure provided by the building regulations of this jurisdiction, as specified in the Building Code, or of any law or ordinance of this state or jurisdiction relating to the condition, location or structure of buildings.

11. Whenever a building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, faulty construction or arrangement, inadequate light, air or sanitation facilities, or otherwise, is determined by the health officer to be unsanitary, unfit for human habitation or in such a condition that is likely to cause sickness or disease.

12. Whenever any building or structure is in such a condition as to constitute a public nuisance known to the common law or in equity jurisprudence.

13. Whenever any portion of a building or structure remains on a site after the demolition or destruction of the building or structure or whenever any building or structure is abandoned for a period in excess of six months so as to constitute such building or portion thereof an attractive nuisance or hazard to the public

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

**116.3 Notice.** If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed

unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

**116.4 Method of service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; or (c) served in any other manner as would constitute good service under the Colorado Rules of Civil Procedure. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in any of the foregoing manners upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

**116.5 Restoration.** Where the structure or equipment determined to be unsafe by the building official is restored to a safe condition, to the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions and change of occupancy shall comply with the requirements of Section 105.2.2 and the International Existing Building Code.

**406.3.4.3 Ducts.** Amend this subsection as follows:

Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit from the garage, including its attic area, shall be constructed of sheet steel of not less than 0.019 inch in thickness 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 loads to be used in determining the design snow loads for roofs shall be determined in accordance with applicable provisions of ASCE 7, though 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 add the following:** (The balance of the section remains unchanged)

**1609.3 Ultimate design wind speed.**

Figure 1609.3(1) equals 115 miles per hour

Figure 1609.3(2) equals 120 miles per hour

Figure 1609.3(3) equals 105 miles per hour

Design wind speed increases for the special wind regions indicated, near mountainous terrain and near gorges shall be as deemed appropriate by the design professional.

**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

**2111.14.1.1 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.

**Table 2902.1 Plumbing Systems.** Revise footnote (e) to read: “For occupancies with an occupant load of 15 or fewer, service sinks and drinking fountains are not required”

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

## **APPENDIX C AGRICULTURAL BUILDINGS**

### **International Residential Code (IRC)**

**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 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 townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height.

**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 amended code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. (The remainder is unchanged)

#### **Add the following as part of this section**

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 or enforcement of other code sections.

**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 International Existing 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 R103 BUILDING DIVISION**

**R103.1 Creation of enforcement agency.** The Building Division is hereby created and the official in charge thereof shall be known as the building official. Code official and building official shall be equivalent and interchangeable terms.

**R103.2 Appointment.** The building official shall be appointed by the Public Works and Development Director or Board of County Commissioners.

**R103.3 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.

**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, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. 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.** Exemption from 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. 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. Permits shall not be required for the following:

**Modify Item #1 as shown below and delete item #10, all other items remain unchanged**  
**R105.2 Building:**

**Item 1.** One-story detached accessory storage sheds, playhouses, shade structures and similar uses, provided the floor area is not greater than 120 square feet, and is not used for the storage of vehicles

**Item 10** – Deleted in its entirety

**R105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefor 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, access, open space and parking requirements, signage, land use restrictions, and related 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 a copy~~ shall be kept on the site of the work until the completion of the project.

**R106.1 Submittal documents.** Submittal documents consisting of construction documents, and other data shall be submitted in two 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, door and window schedules, U factors, and R factors. 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:**

**R106.1.1.2 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 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 Chapter 17 of the 2015 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 construction at which structural observation is to occur. The duties specified in Chapter 17 of the 2015 International Building Code are also incorporated into this Code

**Add the following section:**

**R106.1.1.3 Responsibility for preparation of plans and specifications.** The building official shall require construction documents, computations, and specifications to be prepared, designed, and stamped by an engineer or architect licensed in the State of Colorado. This requirement shall apply to submittals which include, but not limited to:

1. All foundations except for those excluded by code or County policies
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, straw bale structures and other similar structures

**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 NFPA 70 and 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 new subsection:**

**R109.1.4.1 Building sheathing inspection.** A building sheathing / shear wall 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 2015 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 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 or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued, if applicable
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code.
6. The name of the building official.
7. The edition of the code under which the permit was issued.
8. If an automatic sprinkler system is provided.
9. 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.**

## **SECTION R115**

### **UNSAFE STRUCTURES AND EQUIPMENT**

**R115.1 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 that 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, or as further defined herein, 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 this section. A vacant structure that is not secured against entry shall be deemed unsafe.

1. Whenever any door, aisle, passageway, stairway or other means of exit is not of sufficient width or size or is not so arranged as to provide safe and adequate means of exit in case of fire or panic.

2. Whenever the walking surface of any aisle, passageway, stairway or other means of exit is so warped, worn, loose, torn or otherwise unsafe as to not provide safe and adequate means of exit in case of fire or panic.

3. Whenever any portion thereof has been damaged by fire, earthquake, wind, flood or by any other cause, to such an extent that the structural strength or stability thereof is materially less than it was before such catastrophe and is less than the minimum requirements of the Building Code in place at the time of construction of the buildings.

4. Whenever any portion or member or appurtenance thereof is likely to fail, or to become detached or dislodged, or to collapse and thereby injure persons or damage property.
5. Whenever any portion thereof has wracked, warped, buckled or settled to such an extent that walls or other structural portions have materially less resistance to winds or earthquakes than is required in the case of similar new construction.
6. Whenever the building or structure, or any portion thereof, because of (i) dilapidation, deterioration or decay; (ii) faulty construction; (iii) the removal, movement or instability of any portion of the ground necessary for the purpose of supporting such building; (iv) the deterioration, decay or inadequacy of its foundation; or (v) any other cause, is likely to partially or completely collapse.
7. Whenever, for any reason, the building or structure, or any portion thereof, is manifestly unsafe for the purpose for which it is being used.
8. Whenever the exterior walls or other vertical structural members list, lean or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.
9. Whenever the building or structure has been so damaged by fire, wind, earthquake or flood, or has become so dilapidated or deteriorated as to become (i) an attractive nuisance to children; (ii) a harbor for vagrants, criminals or immoral persons; or as to (iii) enable persons to resort thereto for the purpose of committing unlawful or immoral acts.
10. Whenever any building or structure has been constructed, exists or is maintained in violation of any specific requirement or prohibition applicable to such building or structure provided by the building regulations of this jurisdiction, as specified in the Building Code, or of any law or ordinance of this state or jurisdiction relating to the condition, location or structure of buildings.
11. Whenever a building or structure, used or intended to be used for dwelling purposes, because of inadequate maintenance, dilapidation, decay, damage, faulty construction or arrangement, inadequate light, air or sanitation facilities, or otherwise, is determined by the health officer to be unsanitary, unfit for human habitation or in such a condition that is likely to cause sickness or disease.
12. Whenever any building or structure is in such a condition as to constitute a public nuisance known to the common law or in equity jurisprudence.
13. Whenever any portion of a building or structure remains on a site after the demolition or destruction of the building or structure or whenever any building or structure is abandoned for a period in excess of six months so as to constitute such building or portion thereof an attractive nuisance or hazard to the public

**R115.2 Record.** The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

**R115.3 Notice.** If an unsafe condition is found, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

**R115.4 Method of service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; or (c) served in any other manner as would constitute good service under the Colorado Rules of Civil Procedure. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in any of the foregoing manners upon the owner’s agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

**R115.5 Restoration.** Where the structure or equipment determined to be unsafe by the building official is restored to a safe condition, to the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions and change of occupancy shall comply with the requirements of Section 105.2.2 and the International Existing Building Code.

**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 • m<sup>2</sup> • 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 Under-lyment required	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed MPH	Topo-graphic Effects	Special Wind Region	Wind borne debris		Weathering	Frost Line depth	Termite					
30 # Roof 30# non-reducible	115 mph Ultimate Design Speed	NO	NO	NO	B	Severe	36” inches	Slight to moderate	1 degree F	NO	1 <sup>st</sup> 1989 FIRM-FIS 12/2010	712	50.3 F

**R302.5.1 Opening protection.** Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honey-comb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors, equipped with a self-closing, self-latching devices.

## **SECTION R305 CEILING HEIGHT**

**R305.1 Minimum height.** Habitable space, hallways and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm). Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 foot 8 inches. The required height shall be measured from the finish floor to the lowest projection from the ceiling.

**Exceptions:**

1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 7 feet (2134 mm).

2. The ceiling height above bathroom and toilet room 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 ceiling height of not less than 6 feet 8 inches (2032 mm) above an area of not less than 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

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.

4. 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, girders, ducts and other obstructions 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 R305.1.1 is deleted in its entirety**

**R313.1 Townhouse automatic fire sprinklers systems.** An automatic residential fire sprinkler system is not required in townhouses; however, if an automatic residential fire sprinkler system is installed in townhouses, it shall comply with R313.1.1.

**R313.2 One- and Two-family dwellings automatic fire sprinkler systems.** An automatic residential fire sprinkler system is not required in one- and two-family dwellings; however, if an automatic residential fire sprinkler system is installed in one- and two-family dwellings, it shall comply with R313.2.1.

**R315.1 General.** Carbon monoxide alarms shall comply with Section R315, and shall be installed in compliance with the manufacturer's installation instructions.

**R315.2.1 New construction.** For new construction, carbon monoxide alarms shall be provided in dwelling units where either or both of the following conditions exist.

1. The dwelling unit contains a fuel-fired appliance.



2. The dwelling unit has an attached garage. **(Delete remainder of the sentence)**

**R315.2.2 Alterations, repairs and additions.** Where interior alterations, repairs, fuel-fired appliance installations / replacements or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with carbon monoxide alarms located as required for new dwellings.

**Exceptions:**

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, is exempt from the requirements of this section.

**Delete exception #2**

**R315.3 Location.** Carbon monoxide alarms in dwelling units shall be installed within fifteen feet of the entrance to each room lawfully used for sleeping purposes. Where a fuel-burning appliance is located within a bedroom or its attached bathroom, a carbon monoxide alarm shall also be installed within the bedroom.

**R315.4 Combination alarms.** Combination carbon monoxide and smoke alarms shall be permitted to be used in lieu of carbon monoxide alarms, provided that the combined unit produces an alarm, or an alarm and voice signal, in a manner that clearly differentiates between the two hazards.

**Sections R324.7 through 324.7.2.5 are deleted per the published errata (Solar Energy Systems – Access and Pathways)**

**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 drip edge at all eaves, rakes and soffit locations. A flashing shall be installed to divert the water away from where the eave of a sloped roof intersects a vertical sidewall. 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).

**Modify the last sentence of the following section as shown – the remainder is unchanged**

**R905.2.8.5 Drip Edge.** ....Underlayment shall be installed over the drip edge along eaves and under the ~~underlayment~~ drip edge along rake edges.

**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 one and one-half times the maximum system design pressure, but not less than 100 pounds per square inch (689 kPa). The duration of each test shall be not less than 15 minutes and not more than 20 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.

### **Section G2403 – 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 • m<sup>2</sup> • 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 R402.4.2; 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.

**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 or G2407.5.2, except that where the air infiltration rate is known to be less than 0.40 air changes per hour (ACH), Section G2407.5.2 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, are considered to be part of the required volume.

**G2415.12 (404.12) 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.~~

**G2415.12.1 (404.12.1) Individual outside appliances.** Delete this section – see Section G2415.12 for minimum burial depth

**P2603.5.1 Sewer depth.** Building sewers that connect to private sewage disposal systems shall not be less than 12 inches below finished grade at the point of septic tank connection or shall comply with the requirements of Tri-County Health Department, whichever is more restrictive. Building sewers shall not be less than 12 inches below grade.

**P3103.1 Roof extension.** Open vent pipes that extend through a roof shall be terminated not less than 12 inches above the roof or 12 inches above the anticipated snow accumulation, whichever is greater. (The remainder of the section is unchanged).

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

## **APPENDIX H PATIO COVERS**

### **International Mechanical Code (IMC)**

**101.1 Title.** These regulations shall be known as the Mechanical 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 as a referenced or enforcement of other code sections.

**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 and as further regulated in Sections 102.8.1 and 102.8.2. (The remainder is unchanged)

#### **Add the following as part of this section**

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. Code official and building official shall be equivalent and interchangeable terms.

**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 code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code 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, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons why the alternative was not approved. 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 and will not 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.**

**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.**

**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 • m<sup>2</sup> • 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 R402.4.2; 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.

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

**505.1.1 Domestic Kitchen Exhaust Duct installation.** Domestic kitchen 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.** Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed. Ducts shall be considered to be concealed where installed in shafts or covered by coatings or wraps that prevent the ductwork from being visually inspected on all sides. The permit holder shall be responsible to provide the necessary *equipment* and perform the grease duct leakage test. A smoke test shall be performed to determine that all welded and brazed joints are liquid tight.

A smoke test shall be performed in the presence of the mechanical inspector by securely capping off both ends of the section of ductwork to be tested. Smoke shall be introduced into the duct by use of a sufficient number of smoke candles to fill the duct with smoke. Sufficient pressure shall then be introduced into the sealed section of duct, to force smoke out of any openings. Access to all portions of the duct to be inspected shall be provided for the inspector.

#### **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.

## **International Plumbing Code (IPC)**

**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 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 and as further regulated in Sections 102.8.1 and 102.8.2. (The remainder is unchanged)

**Add the following as part of this section.**

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 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 code official. Code official and building official shall be equivalent and interchangeable terms.

**103.2 Appointment.** The code 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 code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code 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, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. 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.**

**305.4.1 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, or shall comply with the requirements of Tri-County Health Department, whichever is more restrictive. Building sewers shall be a minimum of 12 inches below grade.



**Table 403.1 Minimum Number of Required Plumbing Fixtures.** Revise footnote (e) to read: “For occupancies with an occupant load of 15 or fewer, service sinks and drinking fountains are not required”

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

**903.1 Roof extension.** Open vent pipes that extend through a roof shall be terminated not less than 12 inches above the roof or 12 inches above the anticipated snow accumulation. (The remainder of the section is unchanged)

## **International Fuel Gas Code (IFGC)**

**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 to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2. (The remainder is unchanged)

### **Add the following as part of this section**

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.

## **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 code official. Code official and building official shall be equivalent and interchangeable terms.

**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 code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.

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

**105.2 Alternative materials, methods appliances and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any 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, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. 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 PERMITS**

### **106.1 Where 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 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 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.**

**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 – 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.**

### **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 • m<sup>2</sup> • 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 R402.4.2; 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.

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 18 inches below grade, ~~except as provided for in Section 404.12.1.~~

**404.12.1 Individual outside appliances** – Delete this section – see Section 404.12 for minimum burial depth.

## **International Energy Conservation Code (IECC) (2009)**

**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.”

**104.5 Approved inspection agencies.** The code official is authorized to accept reports of approved inspection agencies or other individuals, provided such agencies / individuals satisfy the requirements as to qualifications and reliability.

### **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 – 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.**

## **International Existing Building Code (IEBC)**

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

**102.4 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 and as further regulated in Sections 102.4.1 and 102.4.2.  
(The remainder is unchanged)

### **Add the following as part of this section**

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.

### **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 code official. Code official and building official shall be equivalent and interchangeable terms.

**103.2 Appointment.** The code 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 code official shall have the authority to appoint a deputy code official, the related technical officers, inspectors, plans examiners and other employees. Such employees shall have powers as delegated by the code official.

**104.10 Modifications.** Delete the last (4) words of this section and insert Building Division.

**104.11 Alternative materials, methods appliances and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any 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 code 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, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons why the alternative was not approved. 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 105 PERMITS

**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 or abandoned or if no County inspections have been performed for a period of 180 days after the time that the work is commenced. The code 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.

## SECTION 106 CONSTRUCTION DOCUMENTS

**106.1 General.** Submitted documents consisting of construction documents, special inspection and structural observation programs, investigation and evaluation reports and other data shall be submitted in two 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

jurisdictional policies of the jurisdiction in which the project is to be constructed. Where special conditions exist, the code official is authorized to require additional construction documents to be prepared by a registered design professional.

(The remainder of this section remains unchanged)

## **SECTION 108 – 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 IEBC subsections 108.1 through 108.8.**

**110.2 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 or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued.
5. 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.
6. The name of the code official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy, in accordance with the provisions of the International Building Code.
9. The type of construction as defined in the International Building Code.
10. The design occupant load.
11. If an automatic sprinkler system is provided.
12. 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.

**113.4 Violation penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who repairs or alters or changes the occupancy of the building or structure 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.

**SECTION 112 – 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 IEBC subsections 112.1 through 112.3.**

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