## **ORDINANCE NO. 12**

# AN ORDINANCE REPEALING THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODES AND REPEALING THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE AND ADOPTING THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODES AND THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE WITH AMENDMENTS THERETO

**WHEREAS**, on November 18<sup>th</sup>, 2014, the Board of County Commissioners adopted the 2012 Edition of the International Building Codes and applied it countywide; and,

WHEREAS, the Adams County Building Safety Division is recommending that the 2012 Edition of the International Building Codes and the 2014 National Electrical Code be repealed, and that the Board adopt a county building code modeled upon the building safety standards contained in the 2018 editions of the International Building Codes, which include the 2018 International Building Code, 2018 International Residential Code, 2018 International Plumbing Code, 2018 International Mechanical Code, 2018 International Fuel Gas Code, 2018 edition of the International Energy Conservation Code , 2018 International Swimming Pool and Spa Code, 2018 International Property Maintenance Code, and 2018 International Existing Building Code, with certain amendments thereto; and,

**WHEREAS**, on July 22<sup>nd</sup>, 2014, the Board of County Commissioners adopted the 2014 Edition of the National Electrical Code and applied it countywide; and,

**WHEREAS**, the Adams County Building Safety Division is also recommending adoption of the 2017 edition of the National Fire Protection Association's National Electrical Code; and,

**WHEREAS**, pursuant to§ 30-28-201 et seq., C.R.S., the Adams County Board of County Commissioners is authorized to adopt ordinances and a building code consistent with the Uniform Building Code, 1988 edition, as promulgated by the International Conference of Building Officials; and,

**WHEREAS**, the 2018 Edition of the International Building Codes and the 2017 National Electrical Code are consistent with the Uniform Building Codes, 1988 edition, as promulgated by the International Code Council and the National Fire Protection Association.

**NOW, THEREFORE, BE IT ORDAINED,** by the Board of County Commissioners, County of Adams, State of Colorado, that the 2012 Editions of the International Building Codes and the 2014 Edition of the National Electrical Code as adopted in Ordinance No. 14 be repealed and Ordinance No. 12, the 2018 Edition of the International Building Codes and the 2017 Edition of the National Electrical Code, with certain amendments thereto, the full text of which is available at the Adams County Building Safety Division, and which is fully incorporated herein by this reference, be enacted and adopted.

**BE IT FURTHER ORDAINED** by the Board of County Commissioners, County of Adams, State of Colorado, that:

Section 1. ADOPTION

The Board of County Commissioners of Adams County hereby adopts, by reference, the International Building Codes, 2018 editions, and the National Electrical Code, 2017 edition, with amendments and definitions as described in Section 4, including the following appendices: Appendix C, Group U Agriculture Buildings, and Appendix I, Patio Covers, from the 2018 International Building Code; Appendix A, Sizing and Capacities of Gas Piping, Appendix E, Manufactured Housing Used as Dwellings, <u>Appendix F Radon Control Methods</u>, Appendix H, Patio Covers, Appendix L, Permit Fees, and Appendix M, Home Daycare R-3 occupancies, from the 2018 International Residential Code.

## Section 2. CODE DESCRIBED

The International Building Codes, 2018 editions, are published by the International Code Council, 4051 Flossmoor Road, Country Club Hills, Illinois.

The National Electrical Code, 2017 edition, as published by the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts.

## Section 3. APPLICABILITY

Pursuant to§ 30-28-201, et seq., C.R.S., this Ordinance shall apply to all of the unincorporated areas of Adams County and shall not be embraced within the limits of any incorporated city or town. The provisions of this Ordinance shall not overrule or otherwise restrict the authority of the Board of County Commissioners or any other applicable official of Adams County in authorizing land uses or otherwise acting under the authority of any other adopted codes or regulations of Adams County, or enforcing the provisions thereof.

#### Section 4. AMENDMENTS

#### (1) The following definitions shall be adopted and apply to all Adams County building codes:

*Abandon or abandoned* means the desertion of a building, structure or utility and when all utilities are disconnected and/or the building, structure or utility is left to the mercy of vandalism, dilapidation and deterioration and creates a fire hazard, an unsafe condition or a nuisance.

# Authority having Jurisdiction [AHJ] means Adams County, or Adams County Building Safety Division.

*Attached* means if connected to the principal building or structure, not less than fifty percent of the applicable wall shall be common.

*Building Department* means one and the same in all respects as the Building Safety Division as used in this chapter and elsewhere in County communications and documents, and the two phrases shall be used interchangeably.

*Building Permit* means the official County document authorizing construction activity under the primary and secondary codes.

*Dangerous Building Code* when used herein refers to the latest edition of the Property Maintenance Code as published by the International Code Council.

*Deterioration,* as applied to buildings, structures, equipment and materials, includes corrosion, decay, wear and tear through abuse, obsolescence, effects of the elements, fire damage, lack of maintenance or by any other cause and also includes fatigue due to overstressing, disintegration of the component parts of a building, structure and equipment and the separation of materials and structural parts.

*Health Department* means the Tri-County Health Department designated as the County's health department.

*Homeowner* shall mean the individual shown as having record title of any building or structure as shown in the official records of the Adams County Clerk and Recorder.

*IBC* means the latest edition of the International Building Code, as published by the International Code Council.

*IEBC* means the latest edition of the International Existing Building Code, as published by the International Code Council.

*IECC* means the latest edition of the International Energy Conservation Code, as published by the International Code Council.

*IFC* means the latest edition of the International Fire Code, as published by the International Code Council.

*IFGC* means the latest edition of the International Fuel Gas Code, as published by the International Code Council.

*IMC* means the latest edition of the International Mechanical Code, as published by the International Code Council.

*IPC* means the latest edition of the International Plumbing Code, as published by the International Code Council.

*IRC* means the latest edition of the International Residential Code, as published by the International Code Council.

*ISPSC* means the latest edition of the International Swimming Pool and Spa Code, as published by the International Code Council.

*NEC* means the latest edition of the National Electric Code, as published by the National Fire Protection Association.

*IPMC* means the latest edition of the International Property Maintenance Code, as published by the International Code Council.

*Principle Residence* shall mean, for an individual, the residence as determined by the address given by the individual and shall be the location where the individual(s) habitation is fixed and to which that individual, whenever absent, has the present intention of returning after departure or absence regardless of the duration of such absence. In determining Principle Residence, the following circumstances shall be considered: voter registration address, motor vehicle registration address (as applicable), and or the address given for state income tax purposes

#### (2) Amendments to the 2018 International Building Code

## (a) CHAPTER 1 SCOPE AND ADMINISTRATION

**101.1 Title.** These regulations shall be known as the *Building Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

## 105.2 Work exempt from Building Permit

#### **Buildings/structures:**

2. Fences not over <u>42" (1067 mm)</u> 7 feet (2134 mm) high.

14. Replacement of asphalt shingles when over the aggregate roof area there *is* less than one square of replacement or repair.

# (b) CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

**1511.1 General.** Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15.

#### **Exceptions:**

1. *Roof replacement* or *roof recover* of existing lowslope roof coverings shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage <u>and have been</u> evaluated by a registered design professional for the increase in loading due to potential ponding <u>of water.</u>

2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1503.4 for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1503.4.

**1511.1.1 Extent of replacement**. When more than one square of asphalt shingles are required to be replaced over the aggregate area of any slope, the entire slope containing damaged shingles shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley.

**1511.3.1 Roof recover.** The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.

2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not

rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.

 Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1511.4.
The application of a new protective roof coating over an existing protective roof coating, metal roof panel, built-up roof, spray polyurethane foam roofing system, metal roof shingles, mineralsurfaced roll roofing, modified bitumen roofing or thermoset and thermoplastic single-ply roofing shall be permitted without tear off of existing roof coverings.

**1511.3.1.1 Exceptions:** A roof recover shall not be permitted where any of the following conditions occur:

1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.

2. Where the existing roof covering is wood shake, slate, clay, cement or asbestos cement tile.

3. Where the existing roof has two or more than one application of any type of roof covering.

#### (c) CHAPTER 16 STRUCTURAL DESIGN

**1608.1 General.** Design snow loads shall be determined in accordance with Chapter 7 of ASCE 7, but the design roof load shall not be less than <u>30 pounds per square foot (2.787 m2)</u> or that determined by Section 1607.

**1612.3 Establishment of flood hazard areas.** To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in a report entitled "The Flood Insurance Study for <u>Adams County and Incorporated Areas (Vol. 1. 2. 3) [INSERT NAME OF JURISDICTION]</u> "dated <u>February 17, 2017 [INSERT DATE OF ISSUANCE]</u>, as amended or revised with the accompanying Flood Insurance Rate Map FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

## (d) CHAPTER 18 SOILS AND FOUNDATIONS

**1809.5 Frost Protection.** Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1. Extending <u>6 inches (152 mm)</u> below the frost line. of the locality.
- 2. Constructing in accordance with ASCE 32.
- 3. Erecting on solid rock.

#### (3) Amendments to the 2018 International Residential Code

(a) CHAPTER 1 ADMINISTRATION

**R10I.1 Title.** These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of <u>Adams County [NAME OF JURISDICTION]</u>, and shall be cited as such and will be referred to herein as "this code."

**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* and *International Property Maintenance 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.

#### **Rl05.2 Work Exempt from Building Permit**

Buildings/structures:

2. Fences not over <u>42" (1067 mm)</u> 7 feet (2134 mm) high.

11. <u>Replacement of asphalt shingle when over the aggregate roof area there is less than one square of repair or replacement.</u>

#### (b) CHAPTER 3 BUILDING PLANNING

					CEIMATIC	AND GLOGI	AT THE DES		-1114				
GROUND	WIND DESIGN				SEISMIC	SUBJECT TO DAMAGE FROM			WINTER	ICE BARRIER	FLOOD	AIR	MEAN
SNOW LOAD <sup>o</sup>	Speed <sup>d</sup> (mph)	Topographic effects <sup>k</sup>	Special wind region <sup>l</sup>	Windborne debris zone <sup>m</sup>	DESIGN CATEGORY	Weathering	Frost line depth <sup>b</sup>	<b>Termite</b> °	DESIGN TEMP <sup>e</sup>	UNDERLAYMENT REQUIRED <sup>h</sup>	HAZARDS	FREEZING INDEX <sup>i</sup>	ANNUAL TEMP <sup>j</sup>
30	115	NO	NO	NO	В	SEVERE	36"	Slight to Moderate	1	NO	2017	1500	50.2
						MANUAL J D	ESIGN CRITER	NA <sup>n</sup>					
Elevation			Lattitude	Winter heating		mmer oling			Indoor design temperature	Design temperature cooling		Heating temperature difference	
5,220'			39.8666505 N	6		90	.82		<b>70</b> *	75		64	
Cooling temperature difference		ice	Wind velocity heating	Wind veloc cooling		ncident t bulb			Winter humidity	Summer humidity			
15			15	7.5	6	0	Н		30%	50%			

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

# (c) CHAPTER 4 FOUNDATIONS

**R403.1 General.** All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, crushed stone footings, wood foundations, or other *approved* structural systems that shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footing shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

**Exception:** Pre-manufactured one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.58 m2) may be supported on skids incorporated into the floor system. These structures shall be anchored to the ground with approved materials to resist all applicable loads.

**R403.1.4.1 Frost protection.** Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended <u>6 inches (152 mm)</u> below the frost line specified in Table R301.2.(1);

# (d) CHAPTER 9 ROOF ASSEMBLIES

**R905.2.4 Asphalt shingles.** Asphalt shingles shall comply with ASTM D3462. <u>Asphalt shingles</u> shall be approved and carry a manufacturer's national wind warranty for the wind speed indicated in table R301.2 (1).

**R908.1 General.** Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of Chapter 9.

#### **Exceptions:**

1. Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section R905 for roofs that provide positive roof drainage <u>and have been evaluated by a registered design professional for the increase in loading due to potential ponding of water.</u>

2. For roofs that provide positive drainage, re-covering or replacing an existing roof covering shall not require the secondary (emergency overflow) drains or scuppers of Section R903.4.1 to be added to an existing roof.

**R908.3.1.1 Roof recover not allowed.** A *roof recover* shall not be permitted where any of the following conditions occur:

1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.

2. Where the existing roof covering is slate, clay, cement or asbestos cement tile.

3. Where the existing roof has two or more than one applications of any type of roof covering.

**R908.3.1.1.2 Extent of replacement.** When more than one square of asphalt shingles are required to be replaced over the aggregate area of any slope the entire slope containing damaged shingles shall be replaced in its entirety. The interface of different types of shingles shall only occur at a ridge, hip or open valley.

## (e) CHAPTER 24 FUEL GAS

<u>G2414.10.6 Welded joints.</u> Welded joints shall be performed by a person holding a valid certificate of competency based on the requirements of the ANSI/ASME Boiler and Pressure Vessel Code, Section IX, Brazing and Welding Qualifications. Welded joints shall comply with ASTM 139.

**G2415.12 (404.12) Minimum burial depth**. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) below grade, except as provided for in Section G2415.12.1. <u>Underground plastic piping systems shall be installed a minimum depth of 18 inches</u> (457 mm) below grade.

**G2417.4.1 (406.4.1) Test pressure.** The test pressure to be used shall be not less than  $1\frac{1}{2}$  times the proposed maximum working pressure, but not less than  $3 \ 20$  psig ( $20 \ 30$  kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the *piping* greater than 50 percent of the specified minimum yield strength of the pipe.

#### (f) CHAPTER 25 PLUMBING ADMINISTRATION

**P2503.5.1 Rough plumbing.** DWV systems shall be tested on completion of the rough piping installation by water or, for piping systems other than plastic, by air, without evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

1. Water test. Each section shall be filled with water to a point not less than 5 feet (1524 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.

2. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

**P2503.6 Shower liner test.** Where shower floors and receptors are made water tight by the application of materials required by Section P2709.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 2 inches (51 mm) measured at the threshold. Where a threshold of not less than 2 inches (51 mm) in height does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2 inches (51 mm) in depth measured at the threshold. The water shall be retained for a test period of not less than 15 minutes and there shall not be evidence of leakage.

**P2503.7 Water-supply system testing.** Upon completion of the water-supply system or a section of it, the system or portion completed shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less than 50 psi (345 kPa). This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source.

**Exception:** For PEX piping systems, testing with a compressed gas shall be an alternative to hydrostatic testing where compressed air or other gas pressure testing is specifically authorized by the manufacturer's instructions for the PEX pipe and fittings products installed at the time the system is being tested, and compressed air or other gas testing is not otherwise prohibited by applicable codes, laws or regulations outside of this code.

**P2503.8.2 Testing.** Reduced pressure principle, double check, double check detector and pressure vacuum breaker backflow preventer assemblies shall be tested at the time of installation, immediately after repairs or relocation and every year thereafter.

## (g) CHAPTER 26 GENERAL PLUMBING REQUIREMENTS

**P2601.2 Connections to drainage system.** Plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste connections where required by the code.

**Exception:** Bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to systems complying with Sections P2910 and P2911.

**P2603.3 Protection against corrosion.** <u>Metallic Piping</u>, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or masonry. <u>Metallic Piping</u> shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing material thickness shall be not less than 0.008 inch (8 mil) (0.203 mm) and shall be made of plastic. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

**P2603.5 Freezing**. In localities having a winter design temperature of  $32^{\circ}F(0^{\circ}C)$  or lower as shown in Table R301.2 (1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than <u>48 inches (1219 mm) below</u> finish grade <u>12 inches (3 05 mm) deep and not less than 6 inches (152 mm) below the frost line</u>.

**P2603.5.1 Sewer depth**. *Building sewers* that connect to private sewage disposal systems shall be a not less than [NUMBER] inches (mm) below finished *grade* at the point of septic tank connection. *Building sewers* shall be not less than <u>12</u> [NUMBER] inches (305 mm) below *grade*.

#### (h) CHAPTER 27 PLUMBING FIXTURES

**P2705.1 General.** The installation of fixtures shall conform to the following:

1. Floor-outlet or floor-mounted fixtures shall be secured to the drainage connection and to the floor, where so designed, by screws, bolts, washers, nuts and similar fasteners of copper, copper alloy or other corrosion-resistant material.

2. Wall-hung fixtures shall be rigidly supported so that strain is not transmitted to the plumbing system.

3. Where fixtures come in contact with walls and floors, the contact area shall be water tight.

4. Plumbing fixtures shall be usable.

5. Water closets, lavatories and bidets. A water closet, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition or vanity or closer than 30 inches (762 mm) center-to-center between adjacent fixtures. There shall be a clearance of not less than 21 inches (533 mm) in front of a water closet, lavatory or bidet to any wall, fixture or door. 6. The location of piping, fixtures or equipment shall not interfere with the operation of windows or doors.

7. In flood hazard areas as established by Table R301.2 (1), plumbing fixtures shall be located or installed in accordance with Section R322.1.6.

8. Integral fixture-fitting mounting surfaces on manufactured plumbing fixtures or plumbing fixtures constructed on site, shall meet the design requirements of ASME A112.19.2/CSA B45.1 or ASME A112.19.3/CSA B45.4.

**Exception**: Lavatory clearance from its center to any sidewall or partition may be reduced to a minimum of 12 inches.

**P2708.3 Water supply riser**. Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure using support devices designed for use with the specific piping material or fittings anchored with screws. <u>The rough-in height shall be not less than 75 inches (1.905 mm) above the shower or tub drain.</u>

**P2708.6 Shower head location**. Shower heads shall be so located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.

**P2717.2.1 Dishwasher drain.** Dishwashers may drain into a standpipe complying with Section P2706.1.2. The standpipe shall be provided with an air break.

(i) Part VIII- Electrical Delete chapters 34-43 (Electrical Provisions shall follow the NEC requirements)

#### (4) Amendments to the 2012 International Plumbing Code

#### (a) CHAPTER 1 SCOPE AND ADMINISTRATION

**101.1 Title**. These regulations shall be known as the *Plumbing Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

#### (b) CHAPTER 2 DEFINITIONS

*Trap drain.* The portion of horizontal piping between the weir of a trap and the point where it intersects with the vent serving that same trap (trap arm).

## (c) CHAPTER 3 GENERAL REGULATIONS

**305.4 Freezing.** Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures unless adequate provision is made to protect such pipes from freezing by insulation or heat or both. Exterior water supply system piping shall be installed not less than <u>48 inches</u> (<u>1219 mm</u>) below finish grade. <u>6 inches (152 mm) below the frost line and not less than 12 inches (305 mm) below grade.</u>

**305.4.1 Sewer depth**. Building sewers that connect to private sewage disposal systems shall be installed not less than [NUMBER] inches (mm) below' finished *grade* at the point of septic tank connection. Building sewers shall be installed not less than <u>12 [NUMBER]</u> inches (<u>305 mm</u>) below grade.

**308.5 Interval of support.** Pipe shall be supported in accordance with Table 308.5. <u>Hanger support rods shall be sized in accordance with Table 308.5.1</u>

Table 308.5.1 Hanger Rod Size					
Pipe and Tube Size	Rod Size				
<sup>1</sup> / <sub>2</sub> " – 4"	3/8"				
5" – 8"	1/2"				
10"-12"	5/8"				

**308.7.1 Location.** For pipe sizes greater than 4 inches (102 mm), restraints shall be provided for drain pipes <u>utilizing mechanical joints</u> at all changes in direction and at all changes in diameter greater than two pipe sizes. Braces, blocks, rodding and other suitable methods as specified by the coupling manufacturer shall be utilized.

**312.1 Required tests**. The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.10 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or, for piping system other than plastic, by air. After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.

**312.3 Drainage and vent air test.** Plastic piping shall not be tested using air. An air test shall be made by forcing air into the system until there is a uniform gauge pressure of 5 psi (35.4 kPa) or sufficient to balance a 10 inch (254 mm)column of mercury. This pressure shall be held for a test period of not less than 15 minutes. Any adjustments to the test pressure required because of changes in ambient temperature or the seating of gaskets shall be made prior to the beginning of the test period.

**312.9 Shower liner test.** Where shower floors and receptors are made water tight by the application of materials required by Section 421.5.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor receptor area shall be filled with potable water to a depth of not less than 2" inch (51 mm) measured at the threshold. Where a threshold of 2 inches (51 mm) or higher does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 2" (51 mm) deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes, and there shall not be evidence of leakage.

312.10.1 Inspections. Annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether the assemblies are operable and air gaps exist.

**312.10.2 Testing.** Reduced pressure principle, double check, pressure vacuum breaker, reduced pressure detector fire protection, double check detector fire protection, and spill-resistant vacuum breaker backflow preventer assemblies and hose connection backflow preventers shall be tested at the time of installation, immediately after repairs or relocation and at least annually <u>by a certified cross connection control technician</u>. The testing procedure shall be performed in <u>its entirety</u> in accordance with one of the following standards: ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 or CSA B64.10.1.

# (d) CHAPTER 4 FIXTURES, FAUCETS AND FIXTURE FITTINGS

**403.1 Minimum number of fixtures.** Plumbing fixtures shall be provided in the minimum number shown in Table 403.1, based on the actual use of the building or space. Uses not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the International Building Code. <u>Lavatories to water closet or urinal ratios in accordance with Table 403.1 shall be maintained in all restrooms.</u>

**405.3.2 Public Lavatories.** In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet.

**Exception:** In E occupancies, lavatories located outside a toilet room located within the classroom serving students from that classroom only shall be permitted. These toilet rooms and lavatories shall not count toward the total fixture count required by Table 403.1.

**421.2 Water supply riser**. Water supply risers from the shower valve to the shower head outlet, whether exposed or concealed, shall be attached to the structure. The attachment to the structure shall be made by the use of support devices designed for use with the specific piping material or by fittings anchored with screws. The rough-in height shall be not less than 75 inches (1.905 mm) above the shower or tub drain.

**421.2.1 Shower head location.** Shower heads shall be located on the sidewall of shower compartments or be arranged so the shower head does not discharge directly at the entrance to the compartment and the bather can adjust the valve prior to stepping into the shower spray.

**421.2.1.2 Shower valve location**. A shower or tub /shower control valve shall be installed only where the spout and/or shower head discharges into an approved tub or shower compartment.

#### Exception: Emergency showers.

**425.3 Water closet seats.** Water closets shall be equipped with seats of smooth, non absorbent material. Seats of water closets provided for public or employee toilet facilities shall be hinged open-front type. Integral water closet seats shall be of the same material as the fixture. Water closet seats shall be sized for the water closet bowl type.

**Exception:** Water closets installed in public restrooms for the purpose of complying with accessible fixtures as required by Section 404 fitted with the "AXS-Wingman Universal Design Water Closet Seat" having a closed front are permitted.

# (e) CHAPTER 5 WATER HEATERS

**504.6.1. Collection of Relief Valve Discharge.** A means shall be provided to capture the discharge from a relief valve and convey it to the sanitary drainage system or exterior of the structure either by gravity or a pumped discharge.

#### **Exceptions:**

1. Replacements for existing water heaters.

2. Where a water sensing device wired to a normally closed solenoid valve installed in the water service piping is placed within the water heater drain pan.

**504.6.1.1 Pumped discharge of relief valve collection.** Pumps used to discharge the clear water collection of relief valves shall have an operating temperature equal to or exceeding that of the

relief valve discharge temperature and shall have a gpm rating equal to or greater than the discharge of the relief valve.

# (f) CHAPTER 6 WATER SUPPLY AND DISTIBUTION

**605.15.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture, and an approved primer shall be applied. Solvent cement, orange in color, and conforming to ASTM F493, shall be applied to joint surfaces. The joint shall be made while cement is wet, in accordance with ASTM D2846 or ASTM F493. Solvent cement joints shall be permitted above or below ground.

**Exception:** A primer is not required where all of the following conditions apply: 1. The solvent cement used is a third-party certified as conforming to ASTM F493.

2. The solvent cement used is yellow in color.

3. The solvent cement is used only for joining <sup>1</sup>/<sub>2</sub> inch (12.7 mm) through 2 inch diameter (51 mm) CVPC/AL/CPVC pipe and CPVC fittings.

4. The CVPC fittings are manufactured in accordance with ASTM D2846.

**608.17.11 Connection to graywater system.** The potable water system connection to a graywater system must be protected against backflow by an air gap or reduced pressure principle backflow prevention assembly.

#### (g) CHAPTER 7 SANITARY DRAINAGE

**705.10.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F656 shall be applied. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent cement joints shall be permitted above or below ground.

**Exception:** A primer is not required where both of the following conditions apply: 1. The solvent cement used is third party certified as conforming to ASTM D2564. 2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in nonpressure applications in sizes up to and including 4 inches (102 mm) in diameter.

#### (h) CHAPTER 8 INDIRECT/SPECIAL WASTE

**802.1.6 Commercial dishwashing machines.** The discharge from a commercial dishwashing machine shall be through an *air gap* or *air break* into a waste receptor in accordance with Section 802.3.

**Exception**: Domestic dishwashing machines may be connected to a separately trapped stand pipe provided with an air break.

#### (i) CHAPTER 9 VENTS

**903.1 Roof extension**. Open vent pipes that extend through a roof shall be terminated not less than <u>6 inches (152 mm)</u> [NUMBER] above the roof, except that where a roof is to be used for any

purpose other than weather protection, the vent extensions shall terminate not less than 7 feet (2134 mm) above the roof.

**903.2 Frost closure.** Where the 97.5 percent value for outdoor design temperature is  $0^{\circ}F(-18^{\circ}C)$  or less, vent extensions through a roof or wall shall be not less than 3 inches (76mm) in diameter. Any increase in the size of the vent shall be made not less than 1 foot (305 mm) inside the thermal envelope of the building.

**912.1 Horizontal wet vent permitted.** Any combination of fixtures within two *bathroom groups* located on the same floor level is permitted to be vented by a horizontal wet vent. The wet vent shall be considered to be the vent for the fixtures and shall extend from the connection of the dry vent along the direction of the flow in the drain pipe to the most downstream *fixture drain* connection to the *horizontal branch drain*. Each wet-vented *fixture drain* shall connect independently to the horizontal wet vent. Only the fixtures within the *bathroom groups* shall connect to the wet-vented *horizontal branch drain*. Any additional fixtures shall discharge downstream of the horizontal wet vent.

**Exception**: Fixtures other than those considered to be bathroom group fixtures, of equivalent drainage fixture units, may be included in the wet vented section provided the total number of drainage fixture units does not exceed the total number included in two bathroom groups.

**918.7 Vent required**. Within each plumbing system, not less than one stack vent or vent stack shall extend outdoors to the open air. <u>Individual tenant spaces within a multi-unit building shall</u> have not less than one stack vent or vent stack that extends outdoors to the open air.

## (j) CHAPTER 10 TRAPS, INTERCEPTORS AND SEPARATORS

**1002.1 Fixture traps.** Each plumbing fixture shall be separately trapped by a liquid-seal trap, except as otherwise permitted by this code. The vertical distance from the fixture outlet to the trap weir shall not exceed 24 inches (610 mm), and the horizontal distance shall not exceed 30 inches (610 mm) measured from the centerline of the fixture outlet to the centerline of the inlet of the trap. The height of a clothes washer standpipe above a trap shall conform to Section 802.3.3. A fixture shall not be double trapped.

# **Exceptions:**

1. This section shall not apply to fixtures with integral traps.

2. A combination plumbing fixture is permitted to be installed on one trap, provided that one compartment is not more than 6 inches (152 mm) deeper than the other compartment and the waste outlets are not more than 30 inches (762 mm) apart.

3. A grease interceptor intended to serve as a fixture trap in accordance with the manufacturer's installation instructions shall be permitted to serve as the trap for a single fixture or a combination sink of not more than three compartments where the vertical distance from the fixture outlet to the inlet of the interceptor does not exceed 30 inches (762 mm) and the *developed length* of the waste pipe from the most upstream fixture outlet to the inlet of the interceptor does not exceed 60 inches (1524 mm).

4. Floor drains in multilevel parking structures that discharge to a building storm *sewer* shall not be required to be individually trapped. Where floor drains in multilevel parking structures are required to discharge to a combined *building sewer* system, the floor drains shall not be required

to be individually trapped provided that they are connected to a main trap in accordance with Section 1103.1.

5. Trench and floor drains connected to a sand oil interceptor need not be individually trapped provided the drain piping from the trench or floor drains is turned down after entering the interceptor so the discharge point is a minimum of 4 inches below the standing water level of the interceptor.

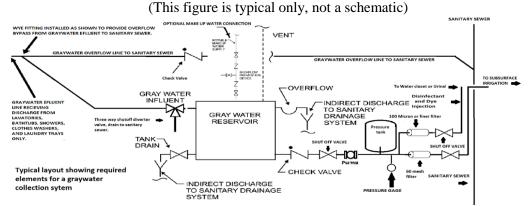
**1003.1 Where required.** Interceptors and separators shall be provided to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the public sewer, the private sewage system or the sewage treatment plant or processes.

**Exception**: Where special regulations exist by the local waste water and/or sanitation district into which the grease trap or interceptor effluent is transported and/or treated. These regulations may supersede this requirement.

#### (k) CHAPTER 11 STORM DRAINAGE

**1101.3 Prohibited drainage.** Storm water shall not be drained into *sewers* intended for sewage only. Storm water from roof drains shall not discharge over public walkways.

Exception: Secondary drains.





#### (I) CHAPTER 13 NONPOTABLE WATER SYSTEMS

**1301.9.6 Overflow.** The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow pipe shall be protected from insects or vermin. The overflow drain shall not be equipped with a shutoff valve and shall discharge into the sanitary sewer either directly or indirectly with a trap in the drain line to keep odors from escaping the tank. A cleanout shall be provided on each overflow pipe in accordance with Section 708.

**1301.9.9 Draining of tanks** Delete the text "shall discharge as required for overflow pipes and". Replace it with: shall discharge into the sanitary sewer either directly or indirectly with a trap in the drain line to keep odors from escaping the tank

**1301.11 Trenching requirements for nonpotable water piping.** Nonpotable water collection and distribution piping and reclaimed water piping shall be separated from the *building sewer* and potable water piping underground by 5 feet (1524 mm) of undisturbed or compacted earth. Nonpotable water collection and distribution piping shall not belocated in, under or above cesspools, septic tanks, septic tank drainage fields or seepage pits. Buried nonpotable water piping shall comply with the requirements of Section 306.

#### **Exceptions:**

1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the *sewer* is not less than 12 inches (305 mm) above the top of the highest point of the *sewer* and the pipe materials conform to Table 702.3.

2. The required separation distance shall not apply where the bottom of the potable water service pipe within 5 feet (1524 mm) of the nonpotable water pipe is not less than 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table 605.4.

**1301.12 Outdoor outlet access.** Sillcocks, hose bibbs, wall hydrants, yard hydrants and other outdoor outlets- supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.

**1302.1 General.** The provisions of ASTM E2635 and Section 1302 shall govern the construction, installation, alteration and repair of on-site nonpotable water reuse systems for the collection, storage, treatment and distribution of on-site sources of nonpotable water as permitted by the jurisdiction. <u>All plumbing systems utilizing nonpotable water reuse systems shall have a double check valve installed at the water service entrance immediately downstream of the building water <u>service shut off valve</u>.</u>

**1302.5 Filtration.** Untreated water collected for reuse shall be filtered as required for the intended end use. Filters shall be provided with *access* for inspection and maintenance. Filters shall utilize a pressure gauge or other *approved* method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves immediately upstream and downstream to allow for isolation during maintenance. <u>Graywater used for dispersed subsurface irrigation system requires a cartridge filter. The cartridge filter must be a minimum of 60 mesh located between the storage tank and the irrigation system.</u>

**1302.6.1 Gray water used for fixture flushing.** Gray water used for flushing water closets and urinals shall be disinfected and treated by an on-site water reuse treatment system complying with NSF 350. <u>Graywater used for toilet and urinal flushing shall be dyed with blue or green food</u> grade vegetable dye and be visibly distinct from potable water.

**1302.7.3 Overflow**. Storage tank for on-site nonpotable systems must include an overflow line without a shut off valve. The overflow line shall be connected to the sanitary sewer either directly or indirectly. The overflow line must be the same or larger diameter line than the tank influent line. The overflow line connected indirectly must be trapped to prevent the escape of gas vapors from the tank

**1302.7.4 Venting.** Storage tank for on-site nonpotable systems must be vented. Indoor tanks must be vented to the atmosphere outside the building or connected to the plumbing vent system.

**1302.7.5 Tank Drains.** Storage tank for on-site nonpotable systems must include a valved drain. The drain shall be indirectly connected to the sanitary sewer. The tank drainline must be the same or larger diameter line than the tank influent line.

**1302.8.1 Bypass valve.** One three way diverter valve listed and labeled to NSF 50 or other *approved* device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated on site reuse sources to the sanitary *sewer* to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be marked to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be provided with *access* that allows for removal. Two shutoff valves shall not be installed to serve as a bypass valve.

**1302.8.1 System Bypass** One three-way diverter valve listed and labeled to NSF 50 or other approved device shall be installed on collection piping upstream of any graywater treatment equipment, as applicable, to divert untreated on-site reuse sources to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be marked to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be installed in accessible locations. Two shutoff valves shall not be installed to serve as a bypass valve. In addition to the bypass valve a series of drainage fittings shall be installed in the collection piping upstream of the bypass valve in a configuration that will allow the graywater from the plumbing fixtures to automatically flow directly into the sanitary sewer system in the event the filter or other parts of the collection system become clogged to the point of not allowing the effluent free flow through the system. The overflow line connected to the sanitary sewer shall be equipped with a backwater valve.

Section 1303 Nonpotable rainwater collection and distribution systems Delete in its entirety

**Chapter 14 Subsurface landscape irrigation systems** Delete in its entirety

#### (5) Amendments to the 2018 International Mechanical Code

#### (a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *Mechanical Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

#### (6) Amendments to the 2018 International Fuel Gas Code

#### (a) CHAPTER 1 SCOPE AND ADMINISTRATION

**101.1 Title.** These regulations shall be known as the *Fuel Gas Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

**101.2.2 Piping systems.** These regulations cover *piping* systems for natural gas with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less, and for LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in Section 402.7. Coverage shall extend from the *point of delivery* to the outlet of the *appliance* shutoff valves.

*Piping* system requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation. and maintenance.

# (b) CHAPTER 4 GAS PIPING INSTALLATIONS

**403.10.6 Welded Joints.** Welded joints shall be performed by a person holding a valid certificate of competency based on the requirements of the ANSI/ASME Boiler and Pressure Vessel Code, Section IX, Brazing and Welding Qualifications. Welded joints shall comply with ASTM 139.

**404.12 Minimum burial depth**. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) below grade except as provided for in Section 404.12.1. <u>Underground</u> plastic piping systems shall be installed a minimum depth of 18 inches (457 mm) below grade.

**406.1 General.** Prior to acceptance and initial operation, all *piping* installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code. Inspection and pressure testing shall apply to temporary installations connected to a primary fuel gas source for the purpose of supplying temporary heat.

**406.4.1 Test pressure.** The test pressure to be used shall be not less than  $1\frac{1}{2}$  times the proposed maximum working pressure, but not less than 3 20 psig (20 30 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the *piping* greater than 50 percent of the specified minimum yield strength of the pipe.

**408.4 Sediment trap.** Where a sediment trap is not incorporated as part of the appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical. The sediment trap shall be either a tee fitting having a capped nipple of any length installed vertically in the bottommost opening of the tee as illustrated in Figure 408.4 or other device approved as an effective sediment trap. Illuminating appliances, ranges, clothes dryers, decorative vented appliances for installation in vented fireplaces, gas fireplaces and outdoor grills need not be so equipped.

**409.5.3 Located at manifold.** Where the *appliance* shutoff valve is installed at a manifold, such shutoff valve shall be located within 50 feet (15 240 mm) of the *appliance* served and shall be readily accessible and permanently identified. The *piping* from the manifold to within 6 feet (1829 mm) of the *appliance* shall be designed, sized and installed in accordance with Sections 401 through 408.

**409.6.1 Electric Solenoid Valve.** A remotely located electric solenoid emergency shutoff valve may be used for compliance to Section 409.6, when all the following requirements are met.

1. The emergency control shutoff "panic button" shall be readily accessible, located within the laboratory space served, adjacent to the egress door from the space and shall be identified by approved signage stating "Gas Shutoff".

2. The gas solenoid valve shall be a "normally closed" type valve with a manual reset

# (7) Amendments to the 2018 International Energy Conservation Code

#### (a) [CE] CHAPTER 1 SCOPE AND ADMINISTRATION

**C101.1 Title.** This code shall be known as the *Energy Conservation Code* of <u>Adams County</u> [NAME OF JURISDICTION], and shall be cited as such. It is referred to herein as "this code."

**C103.6.3 Systems operation control.** Training shall be provided to those responsible for maintaining and operating equipment included in the manuals required by Section C103.6.2.

The training shall include:

- 1. Review of manuals and permanent certificate.
- 2. Hands on demonstration of all normal maintenance procedures, normal operating modes, and all emergency shutdown and startup procedures.

-3. Training completion report.

#### (b) [CE] CHAPTER 4 COMMERCIAL ENERGY EFFICIENCY

**C403.6.1 Variable air volume and multiple-zone systems.** Supply air systems serving multiple zones shall be variable air volume (VAV) systems that have zone controls configured to reduce the volume of air that is reheated, recooled or mixed in each zone to one of the following:

1. Twenty percent of the zone design peak supply for systems with <u>Direct Digital Control</u> (DDC) and 30 percent for other systems.

2. Systems with **Direct Digital Control** (DDC) where all of the following apply:

2.1. The airflow rate in the deadband between heating and cooling does not exceed 20 percent of the zone design peak supply rate or the zone design peak supply rate or higher allowed rates under Items 3, 4 and 5 of this section.

2.2. The first stage of heating modulates the zone supply air temperature setpoint up to a maximum setpoint while the airflow is maintained at the deadband flow rate.

2.3. The second stage of heating modulates the airflow rate from the deadband flow rate up to the heating maximum flow rate that is less than 50 percent of the zone design peak supply rate.

#### (c) [RE] CHAPTER 1 SCOPE AND ADMINISTRATION

**R101.1 Title.** This code shall be known as the *Energy Conservation Code* of <u>Adams County</u> [NAME OF JURISDICTION], and shall be cited as such. It is referred to herein as "this code."

#### (d) [RE] CHAPTER 4 RESIDENTIAL ENERGY EFFICENCY

**R402.4.1.2 Testing.** The *building* or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour or 0.30 cubic feet per minute for multifamily units and not exceeding three air changes per hour or 0.24 cubic feet per minute for all other residential buildings and dwelling units. in *Climate Zones* 1 and 2, and three air changes per hour in *Climate Zones* 3 through 8. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the *code official*, testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

#### (8) Amendments to 2018 International Existing Building Code

#### (a) CHAPTER 1 SCOPE AND ADMINISTRATION

**101.1 Title.** These regulations shall be known as the *Existing Building Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

#### (b) CHAPTER 2 DEFINITONS

**[BS] DANGEROUS**. Any building, structure or portion thereof that meets any of the conditions described below <u>or meets the definition of dangerous as stated in Section 108.1.5 of the</u> <u>International Property Maintenance Code</u> shall be deemed *dangerous:* 

1. The building or structure has collapsed, partially collapsed, moved off its foundation or lacks the support of ground necessary to support it.

2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.

#### (9) Amendments to the 2018 International Swimming Pool and Spa Code

#### (a) CHAPTER 1 SCOPE AND ADMINISTRATION

101.1 Title. These regulations shall be known as the *International Swimming Pool and Spa Code* of <u>Adams County</u> [NAME OF JURISDICTION], hereinafter referred to as "this code."

**105.6.2 Fee schedule.** The fees for work shall be as indicated in the following schedule: [JURISDICTION TO INSERT APPROPRIATE SCHEDULE] <u>Building Permit Fee</u> <u>Schedule</u>

**105.6.3 Fee refunds.** The code official shall authorize the refunding of fees as follows:

1. The full amount of any fee paid hereunder that was erroneously paid or collected.

2. Not more than <u>80%</u> [SPECIFY PERCENTAGE] percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

## (b) CHAPTER 2 DEFINITIONS

**Residential Swimming Pool (Residential Pool).** A pool intended for use which is accessory to a *residential* setting <u>One and Two Family Dwelling</u> and available only to the household and its guests. <u>Pools accessory to townhomes shall be designed and constructed as Public Swimming</u> <u>Pools Class C</u>. All other pools shall be considered *public pools* for purposes of this code.

#### (c) CHAPTER 3 GENERAL COMPLIANCE

**305.1 General.** The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are equipped with a powered safety cover that complies with ASTM F1346, the areas where those spas or hot tubs or pools are located shall not be required to comply with Sections 305.2 through 305.7.

**320.1 Backwash water or draining water**. Backwash water or draining water shall be discharged to the <u>sanitary sewer</u> or storm sewer, or into an *approved* disposal system on the premise, or shall be disposed of by other means approved by the state or local authority. Direct connections shall not be made between the end of the backwash line and the disposal system. Drains shall discharge through an air gap.

**321.2 Artificial lighting required**. When a pool is open during periods of low natural illumination, artificial <u>Artificial</u> lighting shall be provided so that all areas of the pool, including the bottom *main drains*, will be visible.

**321.3 Emergency illumination**. *Public pools* and pool areas that operate during periods of low illumination shall be provided with sufficient emergency illumination to permit evacuation of the pool and securing of the area in the event of power failure. The emergency lighting intensity shall be not less than 1 foot-candle at the water surface and the walking surface of the deck.

#### (10) Amendments to 2018 International Property Maintenance Code

#### (a) CHAPTER 1 SCOPE AND ADMINISTRATION

**101.1 Title.** These regulations shall be known as the *International Property Maintenance Code* of <u>Adams County [NAME OF JURISDICTION]</u>, hereinafter referred to as "this code."

#### (b) CHAPTER 3 GENERAL REQUIREMENTS

**302.4 Weeds.** *Premises* and *exterior property* shall be maintained free from weeds or plant growth in excess of <u>6 inches</u>-[JURISDICTION TO INSERT HEIGHT IN INCHES]. Noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and gardens.

**304.14 Insect screens.** During the period from [DATE] to [DATE], Every door, window and other outside opening required for *ventilation* of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with *approved* tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25mm), and every screen door used for insect control shall have a self-closing device in good working condition.

**Exception:** Screens shall not be required where other *approved* means, such as air curtains or insect repellent fans, are employed.

#### (c) CHAPTER 6 MECHANICAL AND ELECTRICAL EQUIPMENT

**602.3 Heat supply.** Every *owner* and *operator* of any building who rents, leases or lets one or more *dwelling units* or *sleeping units* on terms, either expressed or implied, to furnish heat to the *occupants* thereof shall supply heat <del>during the period from [DATE] to [DATE]</del> to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, *bathrooms* and *toilet rooms*.

#### **Exceptions:**

1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the *International Plumbing Code*.

2. In areas where the average monthly temperature is above  $30^{\circ}F(-1^{\circ}C)$ , a minimum temperature of  $65^{\circ}F(18^{\circ}C)$  shall be maintained.

**602.4 Occupiable work spaces.** Indoor occupiable work spaces shall be supplied with heat during the period from **[DATE]** to **[DATE]** to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

## **Exceptions:**

1. Processing, storage and operation areas that require cooling or special temperature conditions.

2. Areas in which persons are primarily engaged in vigorous physical activities.

## (11) Amendments to 2017 National Electrical Code

# (a) ARTICIAL 110 REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

**110.14 (D) Installation**. Where tightening torque is indicated as a numeric value on equipment or in installation instructions provided by the manufacturer, a calibrated torque tool shall be used to achieve the indicated torque value, unless the equipment manufacturer has provided installation instructions for alternative method of achieving the required torque. <u>A self certified torque report indicating required torque requirements by the manufacturer's installation instructions have been met shall be provided to the authority having jurisdiction.</u>

# (b) ARTICIAL 230 SERVICES

**230.70(A) (1) Readily Accessible Location.** The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors. When the location of the service meter is at a distance of greater than 50 ft. (16m) from the main structure(s) or building(s), an additional service disconnecting means for each structure or building shall be provided at this location. These disconnects may be cold sequenced or hot sequenced depending on the utility providers preference.

# (c) ARTICIAL 300 UNDERGROUND INSTALLATIONS

**300.5 (D) (3) Protection from damage.** Underground service conductors <u>rated 110 volts to</u> <u>ground or more</u> that are not encased in concrete and that are buried 450 mm (18 in.) or more below grade shall have their location identified by a warning ribbon that is placed in the trench as

least 300 mm (12 in.) above the underground installation. <u>Trenches less than 18 inches, an</u> appropriate depth above the conductors or raceway shall be determined by the installer so as to provide sufficient warning of the presence of the conductors/ raceway.

# (d) ARTICIAL 830 NETWORK-POWERED BROADBAND COMMUNICATIONS SYSTEMS

**830.133 (B) Support of Network- Powered Broadband Communications System Cables. R**aceways shall be used for the intended purpose. Network-powered broadband communications cables shall not be strapped, taped, or attached by any means to the exterior of any conduit or raceway as a means of support. <u>Independent support wires used for support above a drop ceiling shall be independent of all other systems and clearly marked, tagged, or other effective means so as to identify them as being used for Network Powered Broadband Communication Cables. This shall apply to Communication Cables as listed Article 800 also.</u>

## Section 5. PENALTIES

Pursuant to§ 30-28-209, C.R.S., any person who violates the provisions of this Ordinance commits a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than one hundred dollars (\$100), or by imprisonment in the county jail for not more than ten days, or by both such fine and imprisonment. Each day during which such illegal activity occurs shall be deemed to be a separate offense.

## Section 6. REPEAL OF CONFLICTING BUILDING CODES

All conflicting building codes previously adopted by the Adams County Board of County Commissioners are hereby repealed in their entirety and re-enacted in accordance with the provisions of this Ordinance.

# Section 7. SEVERABILITY

The Board of County Commissioners hereby declares that should any article, section, paragraph, sentence, clause or phrase of this Ordinance be held to be unconstitutional or invalid for any reason, such decision shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The Board of County Commissioners hereby declares that it would have passed this Ordinance, and each part or parts thereof, irrespective of the fact that any one part or parts be declared invalid or unconstitutional.

## Section 8. SAFETY CLAUSE

The Board of County Commissioners hereby finds, determines, and declares that this Ordinance is necessary for the preservation of the public health, safety, and welfare.

#### Section 9. DATE OF EFFECT

The Board of County Commissioners of Adams County, Colorado, hereby determines that this Ordinance shall become effective on January 1, 2019.

Adopted this <u>day of November, 2018</u>.

Mary Hodge, Chair Board of County Commissioners Adams County, Colorado

Upon motion duly made and seconded the foregoing Ordinance was adopted by the following vote:

Hodge
O'Doriso
Henry
Tedesco
Hansen
Commissioners

#### CERTIFICATE OF ATTESTATION

STATE OF COLORADO ) County of Adams )

#### CERTIFICATE OF ATTESTATION

I, Stan Martin, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County and State aforesaid do hereby certify that the annexed and foregoing Order is truly copied from the Records of the Proceedings of the Board of County Commissioners for said Adams County, now in my office.

The foregoing text is the authentic text of Adams County Ordinance No. 12. The first reading of said Ordinance took place on October\_\_\_\_\_, 2018, at a regular Board of County Commissioners meeting. It was published in full in a newspaper of general circulation at least ten days before its adoption; to wit, in the Westminster Window and the Thornton Sentinel on November \_\_\_\_, 2018. The Ordinance was adopted on second reading at a regular Board of County Commissioners meeting on November \_\_\_\_\_, 2018, and shall become effective on January 1, 2019.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Brighton, Colorado this <u>day of November</u>, 2018.

County Clerk and ex-officio Clerk of the Board of County Commissioners Stan Martin:

By:

Deputy