## **Chapter 20 Polk County Construction Code**

- 20.1 Purpose and Scope
- 20.2 Codes Adopted by Reference, and Amendments
- 20.3 Appeals
- 20.4 Permits
- 20.5 Inspections and Investigations
- 20.6 Occupancy
- 20.7 Records
- 20.8 Debris
- 20.9 Utilities
- 20.1 Purpose and Scope
- 20.1.1 Title

This Code shall be known and may be cited as the "Polk County Construction Code", except as referred to herein, where it shall be known as "this Code".

## 20.1.2 Permit Required

No person shall undertake any development activity subject to this Code without first obtaining a permit from the Building Official

## 20.1.3 Purpose

The purpose of this Code is to provide minimum standards for the protection and safeguard of life and limb, health, property and the general public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings, structures and domiciles and certain equipment specifically regulated therein within unincorporated Polk County.

#### 20.1.4 Enactment and Effective Date

This Ordinance is hereby adopted and shall become effective on April 2, 2018

## 20.1.5 Interpretation

In interpretation and application of this Code, all provisions shall be considered to be minimum requirements and deemed neither to limit nor repeal any other powers granted under state statutes.

If any federal or state law or other existing Code or regulation allows lesser regulation, this Code shall govern; if any federal or state law or other ordinance requires greater regulation, the regulations imposed by that authority shall govern.

Regardless of any provision of this Code, no land shall be developed or used in violation of state or federal law.

## 20.1.6 Abrogation

This Code is not intended to repeal, abrogate, annul, impair or interfere with any existing public or private easements, covenants, deed restrictions, agreements, rules, regulations, or permits previously adopted or issued pursuant to law.

## 20.1.7 Severability

Should a court of competent jurisdiction hold any article, sentence, clause, phrase, or word of this Code invalid; such decision shall not affect, impair, or invalidate the remaining parts of this Code which can be given effect without the invalid provision.

### 20.1.8 Saving Provision

This Code shall not be construed: as abating any action now pending under prior existing subdivision regulations; or as discontinuing, abating, modifying any penalty pursuant thereto; or as affecting the liability or rights of any person, firm or corporation; or as waiving or annulling any rights of the Jurisdiction existing at the time of adoption of this Code; except as expressly provided herein.

### **20.1.9** Repeal

All ordinances, or portions thereof, of Polk County, which relate to construction codes and are inconsistent with the provisions of this Code are hereby repealed to the extent of such inconsistency.

#### 20.1.10 Amendments

This Code may be amended by the Governing Body after public hearing as prescribed by law.

### 20.1.11 Exemptions

The following activities are exempt from Building permit requirements:

- .1 Farm buildings for farm use upon approval of exemption by the Governing Body;
- .2 State or federal government owned facilities;
- .3 One-story detached accessory structures with a floor area not exceeding 120 square feet;

- .4 Fences not exceeding 6 feet in height, retaining walls less than 4 feet in height unless such wall supports an impoundment, and sidewalks or driveways not more than 30 inches above grade and not over a basement;
- .5 Water tanks less than 5,000 gallons, above ground prefabricated swimming pools less than 18 inches deep which are not emptied in a 24-hour period;
- .6 Cloth shade structures for nurseries, window awnings;
- .7 Oil derricks;
- .8 Temporary stage sets and scenery;
- .9 Playground equipment accessory to single family dwellings;
- .10 Moveable cases, counters, and partitions less than five (5) feet nine (9) inches in height;
- .11 Finish work to include painting, papering, tiling, carpeting, cabinets, and countertops.

The following activities are exempt from Electrical, Gas, Mechanical, and Plumbing permit requirements:

- .12 Minor repair work to include lamp replacement and connection of approved electrical equipment;
- .13 Electrical equipment for radio and television transmissions, but not power supply, or towers or antennas;
- .14 Temporary systems for testing or servicing electrical equipment;
- .15 Portable heating ventilating, or cooling equipment;
- .16 Minor part replacement which does not alter equipment approval or render it unsafe;
- .17 Portable evaporative cooler, or self-contained refrigeration unit with less than 10 pounds of refrigerant, and 1 or less horsepower motor;
- .18 Steam, hot or chilled water piping within regulated equipment;
- .19 Stopping leaks or clearing stoppages in drains, water soil, waste or vent piping, and removal and reinstallation of a water closet provided such work does not involve replacement or rearrangement of valves, traps, pipes or fixtures.

The following repair work is exempt:

.20 Emergency repairs when replacement and repair must take place under emergency conditions, provided a permit application is submitted the next working day.

.21 Ordinary repairs not including structural alteration, walls, means of egress, or alteration replacement or relocation of water, sewer, drainage, gas, oil, soil, waste vent or similar piping, electrical wiring, mechanical or other equipment which may affect public health.

The following activities are exempt from grading permit requirements:

- .22 Farms and farming operations;
- .23 Excavation of not more than 4 vertical feet nor more than 500 cubic yards;
- .24 Fill of not more than 3 vertical feet nor more than 500 cubic yards;
- .25 Excavation, fill, or clearing of an area less than 5000 square feet;
- .26 For the purposes of fighting fires;
- .27 For stockpiling soil, sand, stone, asphalt, gravel and other materials in material processing plants, and storage yards pursuant to an approved site plan;
- .28 For mines, and quarries operating pursuant to county, state and/or federal permits;
- .29 For landfills and other activities for which there is exclusive state or federal jurisdiction.

#### **20.1.12** Question

Unless otherwise provided, that all questions arising in connection with the enforcement of this Code shall be presented first to the Building Official. All appeals from the decisions in connection with this Code shall be as prescribed by this Code.

#### 20.1.13 Administrative Waiver

The Enforcement Officer may waive submission of required information elements of a permit or supplementary information when in his opinion such information is otherwise available or is not necessary to review an application.

#### 20.1.14 Modifications

Wherever there are practical difficulties involved in carrying out the provisions of this code, the Building Official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the Building Official shall fist find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be entered into the Building Permit files of the department.

#### 20.1.15 Violation

Any of the following acts shall be a violation of this Code and shall be subject to the enforcement remedies and penalties provided by this Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances and state law.

- .1 To engage in any development, use, construction, remodeling, or other activity of any nature upon the land or improvements thereon subject to the jurisdiction of this Code without the required permits, certificates, or other forms of authorization as set forth in this Code; or
- .2 To conduct an activity of any nature in any way inconsistent with any approved plan, permit, certificate, or other form of authorization granted for such activity; or
- .3 To violate, by act or omission, any term, variance or waiver, condition, or qualification placed by the Governing Board or its agents upon any required permit, certificate, or other form of authorization for the use, development, or other activity upon land or improvements thereon.
- .4 To erect, construct, reconstruct, alter, repair, convert, maintain or use any building or structure or to use any land in violation or contravention of this Code or any other regulation made under the authority conferred thereby.

### 20.1.16 Enforcement

When the Building Official or his agent finds a violation of this Code:

- .1 He shall notify the owner and/or agent of the property. Such notice shall be as prescribed by the applicable code.
- .2 The owner and /or agent shall immediately remedy the violation, regardless of means of notification.
- .3 If the owner of a property fails to comply, the Building Official shall seek relief by following procedures in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances.

### 20.1.17 Remedies

Any one or all of the following may be used to enforce the provisions of the Code:

- .1 Any violation of this Code or of any condition, order, requirement, or remedy adopted pursuant hereto may be restrained, corrected, abated, mandated, or enjoined by appropriate proceeding pursuant to state law.
- .2 The Building Official may withhold or deny any permit, certificate, or other form of authorization on any land in which there is an uncorrected violation of a provision of this Code.
- .3 The Building Official may condition the authorization of any permit or certificate upon the correction of a deficiency.

.4 The Building Official may revoke approval of a permit or certificate by notifying the Developer and/or landowner in writing the reason for the revocation. Revocation may include, but is not limited to, any of the following reasons:

for any substantial departure from the approved application, plans, or specifications; or

for refusal or failure to comply with the requirements of state or local laws, or

for false statements or misrepresentations made in securing permit approval.

#### 20.1.18 Penalties

Any violation of this Code shall be a misdemeanor or infraction as provided by the Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances and state law. The owner of any land or part thereof; and any contractor, agent or any other person who participates or acts in concert, assists, directs, creates, or maintains any condition that is in violation of the requirements of this Code may be held responsible for the violation and subject to the remedies herein provided.

### 20.1.19 Previous Enforcement

Nothing in this Code shall prohibit the continuation of previous enforcement actions.

#### 20.1.20 C Cumulative Violations

All remedies provided herein shall be cumulative. To the extent that state law may limit the availability of a particular remedy set forth herein for a certain violation or part thereof, such remedy shall remain available for other violations or other parts of the same violations.

## 20.2 Codes Adopted by Reference

Any code adopted by reference in this chapter shall include any appendix contained in the publisher's addition of that code. A portion of the code labeled "commentary" or "explanation" or by a similar term shall be considered a statement of legislative intent, finding, purpose or explanation of the referenced provision and shall be treated as legislative history.

Where provisions of the Code adopted by reference and this Code conflict, this Code shall prevail.

#### 20.2.1 2015 International Fire Code

The 2015 Edition of the International Fire Code, published by the International Code Council, May 2014, a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the code of Polk County for regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices; and from conditions hazardous to life or property in the occupancy of buildings and premises in unincorporated Polk County; and providing for the issuance of permits for hazardous uses and operations; and each and all regulations, provisions, conditions and terms of such International Fire Code, 2015Edition, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following sections are hereby revised:

- .1 Section 101.1 Insert: Polk County
- .2 Delete Section 103 Department of Fire Prevention.
- .3 Delete Sections 105.6. through 105.6.48.
- .4 Delete Section 105.7.
- .5 Delete Section 108.
- .6 Amend Section 109.4guilty of "an offense as specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of Polk County Code of Ordinances, and subject to fines and penalties as specified therein," or both
- .7 Subsection 111.2 Issuance of stop work orders is hereby amended by deleting said subsection and inserting in lieu thereof:

Stop Orders. When work is being done contrary to the provisions of this Code, the technical codes, or other pertinent laws or ordinances implemented through this Code; the Building Official may order work stopped by notice in writing posted on the premises, or by notice served on persons performing the work or causing the work to be done. The owner of the premises, so notified, shall prevent further work from being done on the premises, and any person, so notified, shall stop work, until authorized by the Building Official to proceed.

- .8 Amend Section 111.4 liable to a fine not less than "that specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances."
- .9 Delete Section 307.
- .10 Section 308.1.4 Open-Flame cooking devices, of the IFC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Charcoal burners, other open-flame cooking devices, and other devices that produce ashes or embers shall not be operated on balconies or within twenty (20) feet of combustible construction. Location if LP containers shall comply with Section 6104.

## Exceptions:

- 1. One-and-two-family dwellings, constructed in accordance with the International Residential Code.
- 2. LP-gas cooking devices having LP-gas container with a water capacity not greater than twenty (20) pounds.
- .11 Section 505.1 Address Identification, of the IFC, is hereby amended by deleting said section and inserting in lieu thereof the following:

New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall be black or white and shall contrast with their background. Where required by the fire code official, address numbers shall be provided in greater dimension or additional approved locations to facilitate emergency response. Address numbers

shall be Arabic numbers or alphabetical letters. Numbers and letters shall be a minimum height and a minimum stroke width as dictated by Table 505.1. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

Table 505.1 Minimum Height and Stroke Width ab

Distance from the centerline of the	Minimum Height (in	Minimum Stroke Width (in)				
Public Way (ft)						
Less than 100	4	1/2				
100 - 199	6	3/4				
200 – 299	8	1				
For each additional 100	Increase 2	Increase ½				

- a) Exterior suite identification, minimum height shall be 4 inches and stroke width shall be ½ inch.
- b) Interior suite identification, minimum height shall be 2 inches and stroke width shall be ¼ inch.
- .12 Section 903.2.11.1.3 Basements, of the IFC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Where any portion of a basement is located more than seventy-five (75) ft from openings required by Section 903.2.11.1, the basement shall be equipped throughout with an approved automatic sprinkler system.

.13 Section 903.4.2 Alarms, of the IFC, is hereby amended by deleting said section and inserting in lieu thereof the following:

An approved weather proof audible device suitable for outdoor use with 110 candela visual signal shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

.14 Section 905.3.9 Building Footprint and Access, of the IFC, is hereby established by adding the flowing section:

Section 905.3.9 Buildings Footprint and Access. Where the most remote portion of a floor or story is more than 400 feet from a hose connection or fire department access road the fire code official is authorized to require standpipes to be provided in approved locations. Class I manual standpipes shall be allowed.

.15 Section 907.1.4 FACP (Fire Alarm Control Panels), of the IFC, is hereby established by adding the following section and exception:

Section 907.1.4 FACP (Fire Alarm Control Panels). Each building shall have no more than one (1) FACP. Installation of fire alarm panel shall not exceed six (6) ft in height measured from the floor to the top of the unit.

Exception: Suppression system releasing panels are not required to meet the height requirement of the limitation in the number of panels.

.16 Section 907.6.6 Monitoring, of the IFC, is hereby amended by deleting said section and inserting in lieu thereof the following and exception:

Fire alarm systems required by this chapter of by the International Building Code shall be monitored by a central station approved and listed under UL 827 in accordance with NFPA 72.

Exception: Monitoring station is not required for automatic sprinkler and fire alarm systems in oneand two-family dwellings.

.17 Section 1008.3.1 General, of the IFC, is hereby amended by deleting said section and inserting in lieu thereof the following:

In the event of the power supply failure in rooms and spaces that require two or more means of egress or are 400 square feet or greater, an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Aisles
- 2. Corridors
- 3. Exit access stairways and ramps.
- .18 Section 1008.3.2 Buildings, of the IFC, is hereby amended by deleting said section and inserting in lieu thereof the following:

In the event of the power supply failure in rooms and spaces that require two or more means of egress or are 400 square feet or greater an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Interior exit access stairways and ramps
- 2. Interior and exterior exit stairways and ramps
- 3. Exit passageways
- 4. Vestibules and area on the level of exit discharge used for exit discharge in accordance with Section 1028.1
- 5. Exterior landings as required by Section 1010.1.6 for exit doorways that lead directly to the exit discharge.
- .19 Section 1008.3.3 Rooms and Spaces, of the IFC, is hereby amended by deleting #5 and inserting in lieu thereof the following:
  - #5. Restrooms containing more than one water closet/urinal or that are accessible.
- .20 Section 1009.2 Continuity and Components, of the IFC, is hereby amended by adding the following #11 to said section:
  - #11. Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.
- .21 Section 1010.1.6.1 Landing at Doors, of the IFC, is hereby amended by adding a new section as follows: For landings required by Section 1015.1.5 to be at the same elevation on each side of the door exterior landings at doors shall be provided with frost protection.
- .22 Section 1010.1.9.1 Hardware, of the IFC, is hereby amended by adding the following sentence: Thumb turn locks shall not be allowed.
- .23 Section 1013.1.1 Additional Exit Signs, of the IFC, is hereby amended by adding a new section as follows: Exit signs may be required at the discretion of the Code Official to clarify an exit or exit access.

- .24 Section 1028.5 Access to a Public Way, of the IFC, is hereby amended by adding the following sentence: Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.
- .25 Section 1030.5.3 Window Wells Drainage, of the IFC, is hereby amended by adding the following section: All window wells shall be provided with approved drainage.
- .26 Section 5601.4 Qualifications, of the IFC, is hereby amended by adding the following exception: Exception: Persons in charge of fireworks display or pyrotechnic special effect operations may be less than 21 years of age if they possess a valid PGI display fireworks operator certification or equivalent certification approved by the fire code official.

### 20.2.2 2015 International Mechanical Code

2015 International Mechanical Code The 2015 Edition of the International Mechanical Code, published by the International Code Council, May 2014, a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the code of Polk County for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement addition to, use or maintenance of mechanical systems in unincorporated Polk County and providing for the issuance of permits and collection of fees therefore; and each and all regulations, provisions, conditions and terms of such International Mechanical Code, 2015Edition, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following sections are hereby revised:

- .1 Section 101.1 Insert: Polk County.
- .2 Delete Section 103 Department of Mechanical Inspections.
- .3 Subsection 106.2 Addition- Permits Not Required. Subsection 106.2, Permits not required, of the IMC, is hereby amended by adding the following #9 to said subsection:

Subsection 106.2 Permits not required

- 9. Replacement or relocation of house ventilation fans, bathroom exhaust, dryer vents, window air conditioners, warm air registers, cold air returns and ductwork.
- .4 Section 106.5.1 Delete one hundred per cent (100%) and insert thirty percent (30%)
- .5 Section 106.5.2 Insert: Fee Schedule as adopted by Board of Supervisors resolution.
- .6 Section 106.5.3 Insert 100%, and 100
- .7 Amend Section 108.4 guilty of "an offense as specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of Polk County Code of Ordinances, and subject to fines and penalties as specified therein," or both
- .8 Amend Section 108.4liable to a fine not less than "that specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances."
- .9 Section 108.5 Stop Work Orders of the IMC are hereby amended by deleting said section and inserting in lieu thereof:

Stop Orders. When work is being done contrary to the provisions of this Code, the technical codes, or other pertinent laws or ordinances implemented through this Code; the Building Official may order work stopped by notice in writing posted on the premises, or by notice served on persons performing the work or causing

the work to be done. The owner of the premises, so notified, shall prevent further work from being done on the premises, and any person, so notified, shall stop work; until authorized by the Building Official to proceed.

.10 Section 306.1 Access, of the IMC, is hereby amended by adding the following to said section:

An unobstructed level working space at least thirty (30) inches deep and thirty (30) inches wide shall be provided on any side of equipment where service access is required. Code official or designee may approve service space reductions prior to equipment installation, provided manufacturer's instructions are met. (Excluding suspended ceiling)

.11 Section 306.5 Equipment and Appliances on Roofs or Elevated Structures, of the IMC, is hereby amended by adding the following to said section:

If the tenants of a multiple tenant building have, or are allowed to have, mechanical facilities on or which penetrate the roof, then roof access ladders must be provided for use by all such tenants and their agents and contractors in a manner that does not require accessing space under the control of another tenant.

.12 Section 307.2.4.1 Ductless Mini-Split System Traps, of the IMC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Ductless mini-split equipment that produces condensate shall be installed per manufacturer's instructions.

.13 Section 603.1 General, of the IMC, is hereby amended by adding the following language at the end of the code section:

Air plenums and ducts located in floor and wall cavities shall be separated from unconditioned space by construction with insulation to meet energy code requirements. These include by are not limited to exterior walls, cantilevered floors, and floors above garages.

.14 Section 603.6.1.1 Duct Length, of the IMC, is hereby amended by adding the following language at the end of the code section:

Flexible air ducts shall be designed and installed per manufacturer's installation instructions and requirements.

.15 Section 1107.5.4 Copper Tubing Joints, of the IMC, is hereby amended by adding the following language at the end of the code section:

All press-connect fittings must be listed and labeled for refrigerant piping and installed per manufacturer's instructions.

### 20.2.3 2015 Uniform Plumbing Code

The 2015Edition of the Uniform Plumbing Code, published by the International Association of Plumbing and Mechanical Officials, January2015, a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the code of Polk County for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement addition to, use or maintenance of plumbing systems in unincorporated Polk County and providing for the issuance of permits and collection of fees therefore; and each and all regulations, provisions, conditions and terms of such Uniform Plumbing Code, 2015Edition, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following sections are hereby revised:

- .1 Delete Section 104.4.3 and replace with the following language: Any permit issued by the Authority Having Jurisdiction under the provisions of this code shall expire in accordance with Section 20.3.4 Chapter 20 Polk County Construction Code.
- .2 Delete Section 104.5: Replace with the following: Fee Schedule as adopted by Board of Supervisors resolution. .3 Section 104.5.2 Delete "equal to" in the second sentence and insert thirty percent (30%).
- .4 Subsection 106.3 Penalties of the UPC is hereby amended by adding the following sentence:

Fines and penalties as specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances.

.5 Section 106.4 Stop Orders are hereby amended by deleting and inserting in lieu thereof:

Stop Orders. When work is being done contrary to the provisions of this Code, the technical codes, or other pertinent laws or ordinances implemented through this Code; the Building Official may order work stopped by notice in writing posted on the premises, or by notice served on persons performing the work or causing the work to be done. The owner of the premises, so notified, shall prevent further work from being done on the premises, and any person, so notified, shall stop work; until authorized by the Building Official to proceed.

- .6 Subsection 415.2 Drinking Fountain Alternatives, of the UPC, is hereby amended by deleting first sentence and inserting in lieu thereof the following: Where water is served in restaurants, drinking fountains shall not be required.
- .7 Subsection 412.3 Addition Substitution for Water Closets. Subsection 412.3 Substitution for Water Closets, of the UPC is hereby established by adding the following subsection:
  - 412.7 412.3 Substitution for water closets (IPC)

In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets in all other occupancies.

.8 Section 604.3 Copper or Copper Alloy Tube Exception, of the UPC, is hereby amended by adding the following language:

Copper tube for underground piping shall have a weight of not less than Type K.

.9 Section 609.1 Installation, of the UPC, is hereby amended by adding the following language at end of said section:

Water service piping shall have no less than five (5) feet of soil cover.

- .10 Section 701.2 Drainage Piping, of the UPC, is hereby amended by adding the following language at the end of the list:
  - (7) The use of SDR 23.5 is an acceptable material for [exterior] building sewers.

Note: The following table and text is published in Chapter 4 of the 2015 International Plumbing Code and Chapter 29 of the 2015 International Building Code.

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (IBC/IPC)

				WATER CLOSETS (URINALS SEE SECTION 419.2)		LAVATORIES		DRINKING FOUNTAIN <sup>e, f</sup>		
NO.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	MALE	FEMALE	MALE FEMALE BATHTUBS/SHOWERS		(SEE SECTION 410.1)	OTHER	
			Theaters and other buildings for the performing arts and						.==.=,	
		A-1 <sup>d</sup>	motion pictures	1 per 125	1 per 65	1 per 200		_	1 per 500	1 service sink
			Nightclubs, bars, taverns, dance halls and buildings for similar purposes							
			Restaurants, banquet halls and food courts	1 per 40 1 per 40		1 per 75		_	1 per 500	1 service sink
		A-2 <sup>d</sup>		1 per 75	1 per 75	1 per 200		_	1 per 500	1 service sink
			Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums	1 per 125	1 per 65			_	1 per 500	1 service sink
			Passenger terminals and transportation facilities			·		·		
1	Assembly			1 per 500	1 per 500	1 per 750		_	1 per 1,000	1 service sink
		A-3 <sup>d</sup>	Places of worship and other religious services.	1 per 150	1 per 75	1 pe	er 200	_	1 per 1,000	1 service sink
			Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 75 for the first 1,500	1 per 40 for the first					
		A-4		and 1 per 120 for the remainder exceeding 1,500	1,520and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	_	1 per 1,000	1 service sink
			Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities	1 per 75 for the first 1,500	1 per 40 for the first					
		A-5		and 1 per 120 for the remainder exceeding 1,500	1,520and 1 per 60 for the remainder exceeding 1,520	1 ner 200	1 per 150	_	1 per 1,000	1 service sink
		N-3	Buildings for the transaction of business, professional	remainder exceeding 1,500	Terrialituel exceeding 1,320	1 per 200	1 per 130		1 per 1,000	1 Service sink
2	Business		services, other services involving merchandise, office	1 per 25 for the first 50 and 1 per 50 for the remainder		1 per 40 for the first 80 and 1 per 80 for the				
2	Busilless		buildings, banks, light industrial and similar uses							
		В	Educational facilities	exceed	ding 50	remainder exceeding 80		_	1 per 100	1 service sink
3	Educational	Е		1 per 50		1 p	er 50	_	1 per 100	1 service sink
4	Factory and industrial	54 - 452	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	•	.100	4		(acc Cooling Add)	4 400	A vertical delication of the second of the s
		F-1 and F-2  Residential care		1 pe			er 100	(see Section 411)	1 per 400	1 service sink
		I-1	Hospitals, ambulatory nursing home patients <sup>b</sup>	1 pe			er 10	1 per 8	1 per 100	1 service sink
		I-2	Employees, other than residential care <sup>b</sup>	1 per room <sup>c</sup>			r room <sup>c</sup>	1 per 15	1 per 100	1 service sink per floor
			Visitors, other than residential care	1 pe	1 per 25		1 per 35 —		1 per 100	_
			·	1 pe	er 75	1 per 100		_	1 per 500	_
5	Institutional	I-3	Prisons <sup>b</sup>	1 pe	r cell	1 per cell 1 per 15		1 per 15	1 per 100	1 service sink
			Reformitories, detention centers, and correctional centers <sup>b</sup>							
			Employees <sup>b</sup>	1 pe	er 15	1 per 15 1 per 15		1 per 100	1 service sink	
				1 pe	er 25	1 p	er 35	_	1 per 100	_
		I-4	Adult day care and child care	1 ре	er 15	1 p	er 15	1	1 per 100	1 service sink
6	Mercantile	М	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 pe	er 750	_	1 per 1,000	1 service sink
		R-1	Hotels, motels, boarding houses (transient)	1 per slee	eping unit	1 per sle	eping unit	1 per sleeping unit	<del>_</del>	1 service sink
		R-2	Dormitories, fraternities, sororities and boarding houses (not transient)	1 pe	er 10	1 p	er 10	1 per 8	1 per 100	1 service sink
7	Residential	R-2	Apartment house	1 per dwo	elling unit	1 per dw	velling unit	1 per dwelling unit	_	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units
		R-3	One-and two-family dwellings and lodging houses with five or fewer guest rooms	1 per dwo	elling unit	1 p	er 10	1 per dwelling unit		1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit
		R-3	Congregate living facilities with 16 or fewer persons	1 pe	er 10	1 n	er 10	1 per 8	1 per 100	1 service sink
		R-4	Residential care/assisted living facilities	1 pe			er 10	1 per 8	1 per 100	1 service sink
8	Storage	S-1 and S-2	Structures for the storage of goods, warehouses, storehouse and freight depots. Low and Moderate Hazard.	<u> </u>	r 100		er 100	See Section411	1 per 1,000	1 service sink
				1 pc					,000	

- .11 Section 703.1.1 Building Sewer, of the UPC, is hereby amended by adding the following section:

  The main building drain shall be a minimum of four (4) inches.
- .12 .Section 717.1 General, of the UPC, is hereby amended by adding the following language at end of said section:

The minimum diameter for a building sewer shall be four inches to point of connection.

.13 Section 718.3.1 Protection From Damage, of the UPC, is hereby amended by adding the following section:

Building sewers less than 42 inched below grade shall be cast iron or be protected with an engineered system to prevent damage from freezing and frost heave.

- .14.Section 906.7Frost of Snow Closure, of the UPC, is hereby amended by inserting the following language: Change two (2) inches (50.8 mm) to three (3) inches (76.2 mm). Add the following sentence at the end of the paragraph, "Main vents of 3 inches in diameter shall have terminals of not less than 4 inches.
- ..1513 Section 908.1: Delete "vertical" in the first sentence of the section.
- ..1614 Delete Table 10-1 1002.2 and insert the following new table 10-1 1002.2:

TABLE 10-1 1002.2 Horizontal Distance of Trap Arms (except for water closets and similar fixtures) \*

Trap Arm Size (In)	Distance Trap to Vent (Ft)
1 ¼	5
1 ½	6
2	8
3	12
4 or larger	12

Slope one-fourth (1/4) inch per foot

- \*The developed length between the trap of a water closet or similar fixture (measured from the top of the closet ring (closet flange) to the inner edge of the vent) and its vent shall not exceed six (6) feet.
- .17 Subsection 1014.1 Grease Interceptors, of the UPC, is amended by deleting said subsection and inserting in lieu thereof the following: Subsection 1014.1 Grease Interceptors shall comply with Division 5, Chapter 19 of the Polk County Code of Ordinances.
- .18 Section 1208.5.3.4 Corrugated Stainless Steel, of the UPC, is hereby amended by deleting said section and inserting in lieu thereof the following: Only CSST with an Arc Resistant Jacket or Covering System listed in accordance with ANSI LC-1 (Optional Section 5.16)/CSA 6.26-2016 shall be installed in accordance with the terms of its approval, the conditions of listing, the manufactures instructions and this code including electrical bonding requirements in Section 1211.2. CSST shall not be used for through wall penetrations from the point of delivery of the gas supply to the inside of the structure. CSST shall not be installed in locations where subject to physical damage unless protected in an approved manner.

#### 20.2.4 2015 International Building Code

The 2015 Edition of the International Building Code, published by the International Code Council, May 2014, a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the building code of Polk County for the control of building and structures as therein provided in unincorporated Polk County; and each and all regulations, provisions, conditions and terms of said International Building Code, 2015Edition, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following sections are hereby revised:

- .1 All Sections: Change any references of the International Plumbing Code to Uniform Plumbing Code.
- .2 All Sections: Delete any references to the International Private Sewage Disposal Code.
- .3 Section 101.1: Insert Polk County
- .4 Section 105.2 Work Exempt From Permit: Under "Building" change #2 to read: Fences not over 6 ft high. Under "Building" delete # 3: Retaining walls shall conform to Section 20.2.5 (19) of Chapter 20 Polk County Construction Code. Under "Building" change #9 to read: Prefabricated swimming pools shall conform to the Polk County Zoning Ordinance.
- .5 Delete Section 105.5 and insert the following language:

  Expiration of permits shall be in accordance with Section 20.3.4 of Chapter 20 Polk County Construction Code
- .6 Delete Section 109.2and replace with the following: Fee Schedule as adopted by Board of Supervisors resolution.
- .6 Section 109.4Add new sentence: Thirty percent (30%) shall be added to the fee for permits where work started without a permit.
- .8 Delete Section 110.3.7
- .9 Section 111.1 Use and Occupancy, of the IBC is hereby amended by deleting first sentence and inserting in lieu thereof the following: Section 111.1 Use and Occupancy. A building or structure shall not be used or occupied, and a change in the existing use classification of a building or structure or portion thereof shall not be made, until the appropriate permits have been pulled and the building official has issued a certificate of occupancy therefor as provided herein.
- .10 Section 114.4 is amended by adding the following sentence: Fines and penalties as specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances.
- .11 Delete Section 115 and insert language as follows:

Stop Orders. When work is being done contrary to the provisions of this Code, the technical codes, or other pertinent laws or ordinances implemented through this Code; the Building Official may order work stopped by notice in writing posted on the premises, or by notice served on persons performing the work or causing the work to be done. The owner of the premises, so notified, shall prevent further work from being done on the premises, and any person, so notified, shall stop work; until authorized by the Building Official to proceed.

.12 Section 202 Definition, of the IBC, are hereby amended by deleting the definition of swimming pool and inserting in lieu thereof the following:

Swimming Pool: A "swimming pool" is an outdoor artificial basin of water of either temporary or permanent construction, whether above or below ground, capable of containing water of a depth of eighteen (18) inches or more, and which is not emptied within a twenty-four (24) hour period. Swimming pools exclude man-made lakes, or ponds created through the collection of storm water or drainage runoff, and hot tubs equipped with a latching cover.

.13 Section 308.6.4 Five or fewer persons receiving care in a dwelling unit, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

308.6.4 Eight or fewer persons receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having eight or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

.14 Section 310.5 Residential Group R-3, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following

310.5 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two dwelling units

Boarding houses (nontransient) with 16 of fewer occupants

Boarding houses (transient) with 10 or fewer occupants

Care facilities as identified in Sections 308.3.4 or 308.4.2 that provide accommodations for five or fewer persons receiving care

Day care facilities as identified in Section 308.6.4 located within single family dwellings with 8 or fewer persons receiving custodial care

Congregate living facilities (nontransient) with 16 or fewer occupants

Congregate living facilities (transient) with 10 or fewer occupants'

Lodging houses with five or fewer guest rooms

.15 Delete Section 310.5.1 Care facilities within a dwelling unit, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

310.5.1 Care facilities within a dwelling unit. Care facilities that are located within a single-family dwelling are permitted to comply with the International Residential Code in accordance with this section.

.16 Sections 310.5.1.1 and 310.5.1.2 are hereby established by adding the following sections:

Section 310.5.1.1 24-hour care facilities within a dwelling. Care facilities as identified in Sections 308.3.4 or 308.4.2 that provide accommodations for 5 or fewer persons receiving custodial care in a single-family dwelling for 24-hours per day are permitted to comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.33.1.3 or Section P2904 of the International Residential Code.

Section 310.5.1.2 Day care facilities within a dwelling. Day care facilities as identified in Section 308.6.4 that provide custodial care for 8 or fewer persons for less than 24-hours per day in a single-family dwelling are permitted to comply with the International Residential Code.

Exception: Day care facilities as identified in Section 308.6.4 that provide custodial care for 16 or fewer persons for less than 24-hours per day in a single-family dwelling, and are registered with the State of Iowa Department of Human Services as child development homes on or before January 1, 2017, are permitted to comply with the International Residential Code.

- .17 Section 423.4 Group E Occupancies, of the IBC, is hereby amended by adding the following exception to the code section:
  - 4. Existing schools undergoing alterations, additions, or construction of new accessory buildings.
- .18 Section 501.2 Address Identification, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall be black or white and shall contrast with their background. Where required by the fire code official, address numbers shall be provided in greater dimension or additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers and letters shall be a minimum height and a minimum stroke width as dictated by Table 505.1. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

Table 505.1 Minimum Height and Stroke Width ab

Distance from the centerline of the	Minimum Height (in	Minimum Stroke Width (in)	
Public Way (ft)			
Less than 100	4	1/2	
100 - 199	6	3/4	
200 – 299	8	1	
For each additional 100	Increase 2	Increase ½	

<sup>&</sup>lt;sup>a</sup> Exterior suite identification, minimum height shall be 4 inches and stroke width shall be ½ inch.

.19 Section 903.2.11.1.3 Basements, of the IBC, are hereby amended by deleting said section and inserting in lieu thereof the following:

Where any portion of a basement is located more that seventy-five (75) feet from openings required by Section 903.2.11.1, the basement shall be equipped throughout with an approved sprinkler system.

.20 Section 903.4.2 Alarms, of the IBC, are hereby amended by deleting said section and inserting in lieu thereof the following:

An approved weather proof audible device suitable for outdoor use with 110 candela visual signal shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

.21 Section 905.3.9 Building Footprint and Access, of the IBC, is hereby established by adding the following section:

<sup>&</sup>lt;sup>b</sup> Interior suite identification, minimum height shall be 2 inches and stroke width shall be ¼ inch.

Section 905.3.9 Building Footprint and Access. Where the most remote portion of a floor or story is more than 400 feet from a hose connection or fire department access road the fire code official is authorized to require standpipes to be provided in approved locations. Class I manual standpipes shall be allowed.

.22 Section 907.1.4 FACP (Fire Alarm Control Panels), of the IBC, is hereby established by adding the following section and exception:

Section 907.1.4 FACP (Fire Alarm Control Panels). Each building shall have no more than one (1) FACP. Installation of fire alarm panel shall not exceed six (6) ft in height measured from the floor to the top of the unit.

Exception: Suppression system releasing panels are not required to meet the height requirement of the limitation in the number of panels.

.23 Section 907.6.6 Monitoring, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Fire Alarm systems required by this chapter or by the International Fire Code shall be monitored by a central station approved and listed under UL 827 in accordance with NFPA 72.

Exception: Monitoring station is not required for automatic sprinkler and fire alarm systems in one-and two- family dwellings.

.24 Section 1008.3.1 General, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

In the event of the power supply failure in rooms and spaces that require two or more means of egress or are 400 square feet or greater, an emergency electrical system shall automatically illuminate all of the following areas:

- 1.Aisles
- 2.Corridors
- 3. Exit access stairways and ramps.
- .25 Section 1008.3.2 Buildings, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

In the event of the power supply failure in rooms and spaces that require two or more means of egress or are 400 square feet or greater an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Interior exit access stairways and ramps
- 2. Interior and exterior exit stairways and ramps
- 3. Exit passageways
- 4. Vestibules and area on the level of exit discharge used for exit discharge in accordance with Section 1028.1
- 5. Exterior landings as required by Section 1010.1.6 for exit doorways that lead directly to the exit discharge.
- .26 Section 1008.3.3 Rooms and Spaces, of the IBC, is hereby amended by deleting #5 and inserting in lieu thereof the following:
  - #5. Restrooms containing more than one water closet/urinal or that are accessible.
- .27 Section 1009.2 Continuity and Components, of the IBC, is hereby amended by adding the following #11 to said section:
  - #11. Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.

.28 Section 1010.1.6 Landing at Doors, of the IBC is hereby amended by adding the following sentence to said section:

For landings required by Section 1010.1.5 to be at the same elevation on each side of the door exterior landings at doors shall be provided with frost protection.

.29 Section 1010.1.9.1 Hardware, of the IBC, is hereby amended by adding the following sentence to said section:

Thumb Turn Locks shall not be allowed.

- .30 Section 1013.1.1 Additional Exit Signs, of the IBC, is hereby amended by adding a new section as follows: Exit signs may be required at the discretion of the Code Official to clarify an exit or exit access.
- .31 Section 1028.5 Access to a Public Way, of the IBC, is hereby amended by adding the following sentence:

  Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.
- .32 Section 1030.5.3 Window Wells Drainage, of the IBC, is hereby amended by adding the following section:

  All window wells shall be provided with approved drainage.
- .33 Delete Chapter 13 and Amend by inserting in lieu thereof: Chapter 303-State of Iowa requirements for Energy Conservation (Filed ARC 1310C (Notice ARC 1198C, IAB 11/27/13), IAB 2/5/14, effective 3/12/14)
- .34 Add new section: 1608.2.1 The ground snow load for Polk County is 30lbs per square foot.
- .35 Section 1807.2 is amended by deleting current language and inserting the following in lieu thereof: Retaining Walls that are not laterally supported at the top and that retain in excess of 48 inches of unbalanced fill shall be structurally designed by the manufacturer and approved by an lowa Licensed Engineer to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning.
  - .1 All retaining walls shall be set back from property lines by a minimum height to setback distance ratio of 1:1.5.
    - .1 walls proposed to be located closer than the 1:1.5 setback distance ratio shall provide an lowa Licensed Engineer stamped design.
  - .2 Guards or railings shall be provided on retaining walls that are 30 inches or more above grade when the retaining wall is considered part of a building structure, the retaining wall is in close proximity to a finished walking surface (loading dock, sidewalk, bike path, patio, or similar), or in any location on a commercial or multifamily project where the height and location of the retaining wall create an obvious fall hazard.

### 20.2.5 2015 International Residential Code

The 2015 Edition of the International Residential Code for One and Two Family Dwellings, published by the International Code Council, May 2014, a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the code of Polk County for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement addition to, use or maintenance of one and two family dwellings and townhouses not more than three stories in height in unincorporated Polk County and providing for the issuance of permits and collection of fees therefore; and each and all regulations, provisions, conditions and terms of such International Residential Code for One

and Two Family Dwellings, 2015 Edition, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following sections are hereby revised:

- .1 Section R101.1: Insert Polk County
- .2 Section R105.2 Work exempt from permit: Under "Building" change #1 to read: Residential one-story detached accessory structures, provided the floor area does not exceed 120 square feet. Under "Building" change #2 to read: Fences not over 6 ft high. Under "Building" delete #3: Retaining walls shall conform to Section 20.2.5(19) of Chapter 20 Polk County Construction Code. Under "Building" change #7 to read: Prefabricated swimming pools shall conform to the Polk County Zoning Ordinance. Under "Building" change #10 to read: Decks not exceeding 120 square feet in area.
- .3 Section 105.5 Expiration of the IRC is hereby amended by deleting said section and inserting in lieu thereof:

Expiration of permits shall be in accordance with Section 20.3.4 Chapter 20 Polk County Construction Code

.4 Section 108.2 Schedule of permit fees of the IRC is hereby amended by deleting said section and inserting in lieu thereof:

Fee Schedule as adopted by Board of Supervisors resolution.

.6 Subsection 113.4 Violation penalties of the IRC are hereby amended by adding the following sentence:

Fines and penalties as specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances.

.7 Section 114.1 Stop work notice is hereby amended by deleting said section and inserting in lieu thereof:

Stop Orders. When work is being done contrary to the provisions of this Code, the technical codes, or other pertinent laws or ordinances implemented through this Code; the Building Official may order work stopped by notice in writing posted on the premises, or by notice served on persons performing the work or causing the work to be done. The owner of the premises, so notified, shall prevent further work from being done on the premises, and any person, so notified, shall stop work; until authorized by the Building Official to proceed.

.8 Table 301.2(1) Amended- Climate and Geographic Design Criteria
Table 301.2(1) Climate and Geographic Design Criteria, of the IRC, is hereby amended by modifying said table as follows:

Table R301.2(1), Climatic and Geographic Design Criteria

Ground	Wind	Seismic	Weathering	Frost	Termite	Winter	Ice	Flood	Air	Mean
Snow	Speed	Design		Line		Design	Shield	Hazards	Freezing	Annual
Load	(mph)	Category		Depth		Temp	Under		Index	Temp
							Layment			
							Required			
30 PSF	115	Α	Sever	42"	No	-5°F	Yes	5-16-83	1833	48.6°F

.9 Subsection 302.1 Amended- Exterior Walls. Subsection 302.1, Exterior walls, of the IRC, is hereby amended by deleting all exceptions and inserting in lieu thereof the following exception:

Subsection 302.1 Exterior walls exception #1.

Accessory structures less than 10 feet from a dwelling and/or less than 5 feet from a property line shall be provided with 5/8" "X" fire code sheetrock or equivalent throughout the interior, including the walls and ceiling. Any accessory structure opening(s) in wall(s) parallel to and less than 10 feet from the dwelling unit wall(s) shall be fire rated in accordance with this code.

.10 Subsection 302.6 Amended- Dwelling/Garage Fire Separation. Subsection 302.6, Dwelling/garage fire separation, of the IRC is hereby amended by deleting said subsection and inserting in lieu thereof the following subsection:

Subsection 302.6 Dwelling/Garage Fire Separation. The garage shall be separated throughout as required by Table 302.6. Openings in garage walls shall comply with Section 302.5.

.11 Subsection Table 302.6 Amended- Dwelling/Garage Separation. Table 302.6, is hereby amended by modifying said table as follows:

Table R302.6, Dwelling/garage separation

Separation	Material				
From the residence & attics – common wall with garage	5/8" "X" fire code sheetrock or equivalent applied to the garage side				
From all habitable rooms above the garage	5/8" "X" fire code sheetrock or equivalent – throughout garage				
Structures supporting floor/ceiling assemblies used for separation required by this section	5/8" "X" fire code sheetrock or equivalent – throughout garage				
Garages located less than 10 feet from a dwelling units on the same lot	5/8" "X" fire code sheetrock or equivalent – throughout garage				

.12 Section 302.13 Fire Protection of Floors, of the IRC, is hereby amended by deleting exception #4 and inserting in lieu of thereof the following:

Approved floor assemblies demonstrating equivalent fire performance by an approved testing company showing length and time duration for exposure to fire. It shall be defined by performance equivalent to twenty-six (26) minutes using ASTME 119 standard fire endurance testing with a superimposed load simulating a maximum load condition (i.e. 100% design load).

.13 Subsection 303.3 Amended- Bathrooms. Subsection 303.3, Bathrooms, of the IRC is hereby amended by deleting said section and inserting in lieu thereof the following section and also by adding the following exception:

Subsection 303.3 Bathrooms. Bathrooms shall be provided with a mechanical ventilation system. The minimum ventilation rates shall be 50 cfm for intermediate ventilation or 20 cfm for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

Exception 1: Toilet rooms containing only water closet and/or lavatory may be provided with a recirculating fan.

.14 Section R309.1 Floor Surface: Change first sentence to read: "garage or accessory building floor surfaces shall be of concrete, asphalt or approved non-combustible materials."

.15 Section 310.2.2 Window Sill Height, of the IRC, is hereby amended by adding the following exception:

A landing may be provided to meet the maximum sill height of forty-four (44) inches above the floor or landing provided. The landing shall be not less than thirty-six (36) inches wide, not less than twelve (12) inches out from the exterior wall, and not more than twenty-four (24) inches in height. The landing shall be permanently affixed to the floor below or the wall under the window it serves.

.16 Section 311.7.5.1 Risers, of the IRC, is hereby amended by adding exception #3:

The dimension of the top and bottom riser of a stair may vary up to 1-inch from the stairway riser dimension; however, in no case shall the riser height exceed 7 ¾ inches.

.17 Section 313.1 Townhouse automatic fire sprinkler systems, of the IRC, is hereby amended by adding the following exceptions:

Townhouse structures that contain eight (8) or less dwelling units.

Townhouse structures less then eighteen thousand (18,000) square feet floor space, including the garage.

.18 Subsection 313.2 Amended- One And Two Family Dwellings Automatic Fire Systems. Subsection 313.2 One-and-two-family automatic fire sprinkler systems, of the IRC, is hereby amended by adding the following exception:

Subsection 313.2 One-and-two-family automatic fire sprinkler systems exception 2. Dwelling units in which the gross square footage of the dwelling space(s), including all floor levels whether finished or unfinished and all basement areas whether finished or unfinished including attached garage area, does not exceed 8,000 square feet.

.19 Section R322 .2.1 Elevation Requirements: Delete entire section and insert sentence that reads, "Elevation requirements shall be in accordance with the Polk County Zoning Ordinance.

.20 Subsection 403.1.4.1 Frost Protection of the IRC, is hereby amended by deleting all existing exceptions and inserting in lieu thereof the following:

Subsection 403.1.4.1 Frost protection exception 1. Detached garages of light frame wood construction of 1,008 square feet or less in size and more than 10 feet from a dwelling or attached garage may be provided with a floating slab which shall include a thickened slab edge of a minimum 12 inches thick and 12 inches wide with 1 number 4 bar placed top and bottom and floor shall be not less than 4 inches thick with number 4 bar placed 2 foot on center or 6 by 6 mesh. Pour shall be continuous.

.21 Add Table to subsection 404.1.3.2.3. As an alternate to the requirements of respective codes, the following table may be used:

	table Illay i		1	T	I
Height of Foundation Wall	Thickness of Foundation Wall Unit		Reinforcement type and placement within wall**	Reinforcement type and placement within wall (12' span between corners and supporting cross walls)	Type of Mortar
	Concrete	Masonry	Concrete	Masonry	Masonry
8	7 ½"	8"	3- ½" diameter bars with placement in the bottom, middle, and top*	0.075 sq. in. bar 8' o.c. vertically in fully grouted cells. If block is 12" nominal thickness, may be unreinforced.	Type M or S. Grout and Mortar shall meet provisions of Chapter 21 (IBC)
9	8"	8"	½" bars 2' o.c. horizontally & 20" o.c. vertically (5/8" bars 2' o.c	e Chapter 18 (IBC)	ne as above
10	See Chapter 18 (IBC)	See Chapter 18 (IBC)	horizontally & 30" o.c vertically)	Chapter 18 (IBC)	

<sup>\*</sup>Reinforcement bars shall be placed horizontally 3" from top of footing and center of the wall for vertical bars.

Note: Concrete floor slab shall be a minimum of 4". If such floor slab is not provided a designed means of providing lateral support at the bottom of the wall for backfill shall be required.

.22 Section R404.4 is amended by deleting current language and inserting the following in lieu of:

Retaining Walls that are not laterally supported at the top and that retain in excess of 48 inches of unbalanced fill shall be structurally designed by the manufacturer and approved by an Iowa Licensed Engineer to ensure stability against overturning, sliding, excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning.

- .1 All retaining walls shall be set back from property lines by a minimum height to setback distance ratio of 1:1.5.
  - .1 walls proposed to be located closer than the 1:1.5 setback distance ratio shall provide an lowa Licensed Engineer stamped design.
- .2 Guards or railings shall be provided on retaining walls that are 30 inches or more above grade when the retaining wall is considered part of a building structure, the retaining wall is in close proximity to a finished walking surface (loading dock, sidewalk, bike path, patio, or similar), or in any location on a commercial or multifamily project where the height and location of the retaining wall create an obvious fall hazard.
- .23 Delete Chapter 11 and Amend by inserting in lieu thereof: State of Iowa Energy Conservation Requirements 2012 International Energy Code

<sup>\*\*</sup>All reinforcement bars shall meet ASTM A615 Grade 40 and be deformed.

.24 Section 1601.4 Installation, of the IRC, is hereby amended by deleting said section and insert the following in lieu thereof:

Duct installation shall comply with sections M1601.4.1 through M1601.4.11

.25 Section 1601.4.11 Air Plenum and Duct Separation, of the IRC, is hereby amended by adding the following section:

Section 1601.4.11. Air plenums and ducts located in floor and wall cavities shall be separated from unconditioned spaces by construction with sufficient insulation to meet energy code requirements. These areas include but are not limited to exterior walls, cantilevered floors, and floors above garages.

.26 Section G2414.5.3 (403.5.4) Corrugated Stainless Steel Tubing, of the IRC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Arc resistant corrugated stainless steel tubing shall be listed in accordance with ANSI LC-1 (Optional Section 5.16)/CSA 6.26-2016.

.27 Section G2415.2 &404.2) CSST, of the IRC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Only CSST with an Arc Resistant Jacket or Covering System listed in accordance with ANSI LC-1 (Optional Section 5.16)?CSA 6.26-2016 shall be installed in accordance with the terms of its approval, the conditions of listing, the manufactures instructions and this code including electrical bonding requirements in Section G2411. CSST shall not be used for through wall penetrations from the point of delivery of the gas supply to the inside of the structure. CSST shall not be installed in locations where subject to physical damage unless protected in an approved manner.

- .28 Chapters 25 through 32: Delete and use the requirements of the 2015 Uniform Plumbing Code.
- .29 Adoption of Appendix F Radon Control Methods
- .30 Adoption of Appendix M Home Day Care R-3 Occupancy

## **20.2.**6 **2017 National Electrical Code**

The 2017 Edition of the National Electrical Code, published by the national fire Protection Association Inc., a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the code of Polk County for regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement addition to, use or maintenance of electrical systems in unincorporated Polk County and providing for the issuance of permits and collection of fees therefore; and each and all regulations, provisions, conditions and terms of such National Electrical Code, 2017 Edition, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following sections are hereby revised:

- .1 Delete Section 210.12((D))
- .2 Delete Section 406.4(D)(4)

# 20.2.7 2015 International Existing Building Code

The 2015 Edition of the International Existing Building Code, published by the International Code Council, May 2014, a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the code of Polk County for the control of existing buildings and structures as therein provided in

unincorporated Polk County; and each and all regulations, provisions, conditions and terms of said International Existing Building Code, 2015Edition, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following section is hereby revised:

- .1 Section 101.1 Insert Polk County.
- .2 Subsection 108.2 Schedule of permit fees of the IEBC is amended by deleting said subsection and inserting in lieu thereof:

Fee Schedule as adopted by Board of Supervisors resolution.

.3 Subsection 113.4 Violation penalties of the IEBC is hereby amended by adding the following sentence:

Fines and penalties as specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances.

.4 Section 114 Stop Work Order of the IEBC is amended by deleting said subsection and inserting in lieu thereof:

Stop Orders. When work is being done contrary to the provisions of this Code, the technical codes, or other pertinent laws or ordinances implemented through this Code; the Building Official may order work stopped by notice in writing posted on the premises, or by notice served on persons performing the work or causing the work to be done. The owner of the premises, so notified, shall prevent further work from being done on the premises, and any person, so notified, shall stop work; until authorized by the Building Official to proceed.

.5 IEBC is further amended by deleting any references to the International Plumbing Code and replacing with Uniform Plumbing Code.

#### 20.2.8 2015 International Fuel Gas Code

The 2015 Edition of the International Fuel Gas Code, published by the International Code Council, May 2014, a copy of which is on file in the Office of the Building Official, is hereby adopted by reference as the code of Polk County for the control of fuel gas piping systems as therein provided in unincorporated Polk County; and each and all regulations, provisions, conditions and terms of said International Fuel Gas Code, 2015, are hereby referred to, adopted and made part hereof as if fully set out in this code. The following section is hereby revised:

- .1 Section 101.1 Insert Polk County.
- .2 Subsection 106.6.1 Work commencing before permit issuance is hereby amended by replacing 100 percent with 30 percent.
- .3 Subsection 106.6.2 Fee schedule is hereby amended by adding the following: Fee Schedule as adopted by Board of Supervisors resolution.
- .4 Subsection 108.4 Violation penalties is hereby amended by adding the following:

Fines and penalties as specified in Chapter 2 Issuance of Citations and Imposition of Civil Penalties for Violation of County Ordinances and Regulations of the Polk County Code of Ordinances.

.5 Subsection 108.5 Stop work orders is hereby amended by deleting said subsection and inserting in lieu thereof:

Stop Orders. When work is being done contrary to the provisions of this Code, the technical codes, or other pertinent laws or ordinances implemented through this Code; the Building Official may order work stopped by notice in writing posted on the premises, or by notice served on persons performing the work or causing the work to be done. The owner of the premises, so notified, shall prevent further work from being done on the premises, and any person, so notified, shall stop work; until authorized by the Building Official to proceed.

.6 Subsection 403.4.3 Copper and copper alloy of the IFGC is hereby amended by adding the following sentence:

Copper tubing shall not be allowed for conveyance of LP gas in interior locations.

### 20.3 Appeals

## 20.3.1 Building Board of Appeals

There is established a Building Board of Appeals to hear appeals of persons in matters of building construction, safety and code compliance within the scope of the Construction Code as adopted by the Polk County Board of Supervisors.

## 20.3.2 Appeal Application

Any person directly affected by a decision of the Building Official or a notice or order issued under this code shall have the right to appeal. That appeal shall be heard by the Building Board of Appeals. An appeal shall be made in writing and be filed no later than twenty (20) days after the date of the notice or order or decision. An application for appeal shall be based on a claim that:

- (1) the true intent of this Code or the rules legally adopted hereunder have been incorrectly interpreted, or
- (2) the provisions of this Code do not fully apply, or
- (3) the requirements of this Code are adequately satisfied by other means, and the specific proposed alternative action will increase the degree of general code compliance of the specific system or the building and premises, or
- (4) there are specific fixed conditions that make strict compliance with this Code impracticable, or
- (5) required actions cannot be completed within the time limit specified by the Building Official

## 20.3.3 Board Membership and Appointment

The Board shall consist of five members who are qualified by experience and training to pass on matters pertaining to building construction and who are not employees of Polk County. The Board of Appeals shall be appointed by the Board of Supervisors of Polk County for a term of five years. The Building Official shall be an ex-officio member but shall have no vote on any matter before the Board. Membership shall consist of:

- 1 One Iowa registered architect
- 2 One registered professional engineer

- 3 One general contractor or home building contractor
- 4 One plumbing contractor or journeyman plumber
- 5 One electrical contractor or journeyman electrician

## 20.3.4 Meetings

The Board of Appeals shall hold meetings as needed for the purposes of hearing appeals. The Board shall meet upon notice from the Building Official within 20 days of the filing of an appeal, or at the stated periodic dates. An applicant may waive a timely hearing by filing a written waiver explaining the cause for seeking a delay.

### 20.3.5 Board Rules and Procedures and Decisions

The Board shall adopt reasonable rules and regulations for conducting its investigations and shall render all decisions and findings in writing to the Building Official with a duplicate copy to the appellant.

### 20.3.6 Board Records

The Building Official shall designate a qualified person to serve as secretary to the Board. The secretary shall file a detailed record of all proceedings in the Public Works Planning and Development.

#### 20.3.7 Board Authority

The Board has the authority to affirm, modify or reverse the decision of the Building Official.

#### 20.3.8 Action on Board Decision

The Building Official shall take prompt action in accordance with the decision of the Board.

### 20.3.9 Stay of Enforcement

Appeal of a notice and order (other than an Imminent Danger notice) shall stay enforcement of the notice and order until the appeal is heard by the Board.

#### 20.4 Permits

## 20.4.1 Application

Applications for building, electrical, mechanical permits shall be made in accordance with this Section. All work authorized by an electrical, plumbing or mechanical permit shall be performed in accordance with the Polk County Code of Ordinances and Iowa Code Chapter 103 and Chapter 105.

Notwithstanding any provision in this chapter to the contrary, after July 1, 2008 or the date upon the State of Iowa Electrical Examining Board or the State of Iowa Plumbing and Mechanical Systems Examining Board issue licenses, only those persons working in the electrical, mechanical or plumbing trades who have been issued Master, Journeyperson or Apprentice licenses, by the State of Iowa Electrical Examining Board or the State of Iowa Plumbing and Mechanical Systems Examining Board shall be recognized as licensed and eligible to work in Polk County.

- .1 Unless otherwise specified all applications for permits under this Code shall be submitted by the property owner or his authorized agent to the Building Official. The Building Official may require reasonable proof of agency from any person submitting an application as an agent.
- .2 Any person or firm desiring to obtain a permit authorizing electrical, plumbing or mechanical work shall furnish, upon request of Polk County, verification of:
  - a. Class A Master Electrician license issued by the State of Iowa Electrical Examining Board, pursuant to Iowa Code §103.10
    - 1. Notwithstanding any provision in this section to the contrary, a person working in the electrical trades who has been issued a Class A Master Electrician license, pursuant to Iowa Code § 103.10 shall be allowed to operate as a Master Electrician or Electrical Contractor.
  - b. Class B Master Electrician license issued by the State of Iowa Electrical Examining Board, pursuant to Iowa Code § 103.10.
    - 1. However, a person issued a Class B Master Electrician license, pursuant to Iowa Code § 103.10 and has not held a license recognized by Polk County prior to July 1, 2009 shall not be allowed to operate as an electrician, subject to the restrictions contained in Iowa Code § 103.10, §
    - 103.18 and 103.19 until such time he/she obtains Class A Master Electricians licensure.
  - c. A Master license, for plumbing, HVAC, refrigeration or hydronic work, issued by the State of Iowa Plumbing and Mechanical Systems Examining Board, pursuant to Iowa Code § 105.10.
  - d. A 2014 license recognized by Polk County, for those contractors or persons to be regulated by the Plumbing and Mechanical System Licensing Board established pursuant to Chapter 105 of the Iowa Code, as amended July 1, 2008, until the date upon which the State of Iowa Plumbing and Mechanical Systems Licensing Board assumes the powers, duties and responsibilities regarding licensing mandated by the Code and issues such licenses.

Exception: an owner of a single family dwelling may perform electrical, mechanical or plumbing work on the owner's principle residence if such residence is an existing dwelling rather than new construction and is not larger than a single-family dwelling, or farm property, excluding commercial or industrial installations or installations in public use buildings or facilities. In order to qualify for the exception to this section, a residence shall qualify for the homestead tax exemption.

- .3 An application for any permit under this Code shall be submitted in such form, number of copies and format as required by the applicable code. The Building Official may waive submission of required elements of information when in his opinion such information is otherwise available or is not necessary to review of the application.
- .4 Submit with the Permit Application, Floodplain Development Permit Application (if required), Percolation test Soil Analysis for On-Site Wastewater Treatment System (if required), and a State Storm Water Permit (if required). These reports and plans will be reviewed concurrently with the application.

- .5 All applications for permits shall be submitted, reviewed, and processed in accordance with the requirements of this Code. Any permit issued in noncompliance with this Code shall be null and void.
- .6 When Construction Plans or Site Plans are required; approval of those plans will be a precondition to issuance of a permit. Except as otherwise allowed, zoning, floodplain, and subdivision regulations must be met prior to permit issuance.
- .7 A copy of required plans or information submitted with the application shall be returned to the applicant after the Building Official has marked the copy either approved or disapproved and attested to the same. The Building Official shall retain a similarly marked copy.
- .8 Unless otherwise provided, any permit for any building or use for which a State or County on site wastewater treatment system permit or an entrance permit is required; shall not be issued until the State or County has approved such permit.
- .9 Unless otherwise provided, required off-site improvements to include streets, sidewalks, sanitary and storm sewers, street lights, and landscaping must be constructed or guaranteed before a building or use permit can be issued.
- .10 A fee in an amount as set by the Board of Supervisors shall accompany each application. No permit or certificate shall be issued unless or until all charges and fees have been paid in full.

The Polk Emergency Home Repair Program and the Polk County Owner Occupied Home Rehabilitation Program shall be exempt from payment of permit fees. All other requirements of this Code are applicable.

- .11 A plan review fee in the amount set in the Schedule of Fess adopted by the Polk County Board of Supervisors shall be submitted for all projects except for one and two family dwellings and accessory structures.
- .12 No work shall commence until the application is approved and the permit has been issued.
- .13 The permit must be posted in a prominent place on the site at all times it is in effect

#### 20. 4.2 Issuance

Permits shall be issued as follows:

- .1 Plot or Site Plans, if required, must be approved prior to issuance of any permits.
- .2 Permits for onsite wastewater treatment system, if required, must be approved prior to issuance of a building, sign, or use permit.
- .3 For permit purposes, Final Plat recordation may be deferred on group developments; but a Certificate of Occupancy may not be issued until all platting requirements have been met.
- .4 None of the improvements, except clearing, grubbing, and erosion control, may be constructed until a permit has been issued by the Building Official.

- .5 The Building Official may issue permits for not more than two (2) model homes, temporary construction trailers, safety structures, and other customary construction mobilization structures prior to Site Plan approval or Final Plat recordation.
- .6 Review of all plans may be concurrent.

### 20. 4.3 Permit Expiration

- .1 If the work authorized by a permit has not begun within 180 days of the date of issuance thereof, such permit shall be void and a new permit, consistent with all provisions of this Code, shall be required. For the purposes of this Section, construction shall be deemed to have begun at the time of completion of an approved footing inspection.
- .2 If, after date of issuance, the work is discontinued or incomplete for a period of one (1) year, the permit shall immediately expire.
- .3 After a one (1) year duration, permit may be reissued for incomplete work for an additional one hundred eighty (180) day period, if justified, by making a written request to the Building Official prior to the permit expiration date. No permit fee will be required for renewal of a permit, however, surety, if applicable, shall remain in effect.
- .4 After eighteen (18) months, a permit may be renewed for an additional 180 days by payment of 50% of the original fee.
- .5 After twenty-four (24) months, a permit may be renewed for an additional 180 days year by payment of 75% of the original fee.
- .6 After thirty (30) months, a new permit must be issued for the work to be completed, and the work must be completed in accordance with the code in effect at the time of issuance.
- .7 No work authorized by any permit that has expired shall thereafter be performed until a new permit has been secured.

## 20. 4.4 Refunds

Fees may be refunded as follows:

- .1 The Building Official may authorize the full refunding of any permit fee that was erroneously collected or paid. To include applications for permits that were withdrawn before the permit was issued.
- .2 The Building Official may authorize refunding of the permit fee when no work has been done on an issued permit by the time the initial 180-day period lapses.
- .3 The Building Official may authorize not more than 80 percent refund of a permit fee if work has begun at any time and is subsequently discontinued; or if work is not begun within one year.
- .4 After one year no permit fees will be refunded.

### 20.5 Inspections and Investigations

The Building Official shall have the right, upon presentation of proper credentials, or inspection warrant if necessary, to enter on any property or premises, public or private, within the jurisdiction of the Governing Body at any reasonable hour for the purposes of inspection, determination of plan compliance, or for the purpose of investigation of any complaint or alleged violation of this Code.

The Building Official shall have the power to conduct such investigation as he may reasonably deem necessary to carry out his duties as prescribed in this Code, and shall also have the power to require written statements, certificates and certifications or the filing of reports under oath, with respect to pertinent questions relating to complaints or alleged violations of this Code.

# 20.6 Occupancy

A Certificate of Occupancy shall be issued by the Building Official as soon as practical after completion of construction or development. The construction and use provided in the Certificate of Occupancy will be only the use, arrangement, and construction set forth in approved plans and applications. Any use, arrangement, or construction at variance with that authorized shall be deemed a violation.

### 20.6.1 Certification Inspection

Prior to issuance of a Certificate of Occupancy the Building Official shall:

- .1 By on-site inspection ensure compliance with this Code.
- .2 By review of records ensure compliance with all applicable provisions of related health, building, and fire codes.
- .3 If required, ensure a Certificate of Flood-Proofing or Floor Elevation is presented and found correct.
- .4 Ensure all required on-site and off-site improvements have been completed, and that connection to all required utilities have been made.

#### 20.6.2 Certificate Denial

If denied, the Building Official will state the reasons by preparing a written list of deficiencies, cite the appropriate provisions of this Code or other regulations upon which denial is based, and state whether a conditional permit, special permit, variance or other procedure may be required.

## **20.6.3** Temporary Certificate of Occupancy

The Building Official may issue a Temporary Certificate of Occupancy prior to the completion of all construction, alteration, or changes if such occupancy will not endanger health or safety.

.1 Temporary Certificate of Occupancy may be for a time period as the Building Official deems appropriate to complete the work, but not to exceed one hundred eighty (180) days.

.2 If the work is not completed within the period of the Temporary Certificate of Occupancy; the Building Official shall notify the owner immediately. The owner shall cease use of the building and shall not resume such use until a Certificate of Occupancy has been issued. Failure to cease use shall subject the owner to civil penalties, and other enforcement actions.

## 20.7 Records

The Building Official shall retain on file a signed copy of all Permits, all approved and amended Site Plans, all Flood Elevation Certificates and Flood Proofing Certificates, Certificates of Occupancy and documents required by law.

#### 20.8 Debris

No cut trees, timber, debris, contaminated soil, waste concrete, junk, rubbish, sewage, or food waste shall be buried, or left deposited on any private or public lot. During construction waste materials shall be stored in a manner which prevents blowing on or contamination of adjoining lots and public rights-of-way.

#### 20.9 Utilities

### 20.9.1 Utility Connections

Utility lines, connections, and equipment shall be placed in accordance with the following:

- .1 Connection of each lot to public water and sewer shall be required if service is within three hundred (300) feet of the nearest adequate lines of a public system, provided that no geographic or topographic factors would make such connection infeasible.
- .2 Where public sewer is not available: an on-site sewage disposal system shall be provided in accordance with the standards set forth in IAC 567-69.
- .3 Where public water is not available: wells shall be provided in accordance with IAC 567-49.
- .4 All drainage and utility easements will be kept free and clear of any buildings or other structures that would interfere with their proper maintenance.

### 20.9.2 Backflow Prevention

Cross connection from any well or other source of water to any piping system connected to Des Moines Water Works shall not be permitted except upon written permission of Water Works. Definitions used herein refer to those found in Des Moines Water Works Cross Contamination Control Regulations.

- .1 Each owner shall prevent pollutants and contaminants from entering the Water Works distribution mains by backflow.
- .2 All water using devices must be designed that back-siphoning or backflow to the system cannot occur.
- .3 Where harmful contaminants or pollutants are used with any device or process connected to the water system, the owner must install and maintain a reduced pressure backflow prevention device.

- .4 All permanently installed underground sprinkling systems shall contain a device to prevent back-siphoning or backflow to the Water Works distribution system.
- .5 A new backflow prevention device shall be installed:

When an existing plant or facility has major plumbing changes or change of use or occupancy;

When an underground sprinkler system is connected to the Water Works distribution system;

When a potentially dangerous condition is found at an existing plant of facility and an order to correct is issued by Water Works; and

When required by code or law.

.6 When a backflow prevention device is required:

Water Works will review existing water service facilities and new construction plans for degree of hazard, and determine the type of backflow prevention assembly required. Water Works shall notify the existing residences, plants, and facilities of the degree of hazard, the backflow prevention assembly required, and a schedule of compliance.

- .7 The Building Official shall inspect the new installation of the backflow prevention assemblies before initiation of water service.
- .8 When a water service has one or more cross connections:

An air gap or approved backflow prevention assembly for containment is required, if classified as high hazard.

An approved double check valve assembly is required if classified as no or low hazard.

.9 A reduced pressure backflow prevention assembly shall be installed on all new and existing fire protection systems when any of the following conditions exist:

A direct connection form public water mains with auxiliary water supply on or available to the premises for pump connection.

Interconnection with auxiliary water supplies such as reservoirs, rivers, ponds, wells, mills, or other industrial water systems.

Antifreeze or other additives are used in the fire protection system.

Industrial and fire protection systems are supplied from public water mains only, with or without gravity storage or pump suction tanks.

Any facility or connection which may cause contamination.

A double check valve assembly will be required for all new fire protection systems at the time of installation, and all existing fire protections systems at the time of upgrade.

.10 Water Works personnel and the Building Official shall have right of access to any check valve or backflow prevention device located on private property.

.11 To ensure unprotected high hazard cross-connections do not exist without backflow protection, each owner shall:

Ensure cross-connections without backflow assemblies do not exist.

Cause the installation, testing and maintenance of backflow prevention assemblies at his expense; and maintain records of such on forms provided by Water Works.

Notify Water Works of any backflow incident, and take steps to confine pollution or contamination.

Provide water usage information at Water Works request.

.12. Backflow prevention assemblies shall be installed as follows:

For containment assemblies, in horizontal plumbing immediately following the meter or as close to that location as deemed practical by Water Works, but in any case upstream from any branch piping.

For reduced pressure assemblies protection from flooding is required, and they may not be installed in underground pits or vaults.

For all assemblies, protection from freezing is required, or removal, if seasonal; however, required testing must be performed on reinstalled assemblies.

For all assemblies, an accessible and safe location is required, as is a means of conveyance of assembly discharge to a suitable drain. Location of an assembly in ceiling or over or near an electrical panel is unacceptable.

For systems using hot water, thermal expansion is required.

For all assemblies, shut off valves shall conform to the current edition of the Manual of Cross Connection Control published by the University of Southern California, requirements for ball or resilient seat gate valves. Ball valves are require on piping two (2) inches or less, and resilient gates valves are required on piping larger than two (2) inches.

For containment assemblies, location shall be approved by Water Works prior to installation.

- .13 Required backflow prevention assemblies for containment are listed in 641-225.5 (1) State of lowa Plumbing Code.
- .14 Backflow prevention assemblies shall be tested by a tester registered by the Iowa Department of Public Health:

**Upon installation** 

**Annually** 

Subsequent to repair or replacement,

If the water system has been out of operation for 90 or more consecutive days,

Before being placed in service for seasonal applications, and

When required by Water Works.

.15 Any backflow prevention device that fails a test shall be repaired or replaced using only original manufacturer replacement parts by a registered backflow prevention assembly technician prior to the resumption of water service. The design, material, or operational characteristics of a device shall not be changed during repair or maintenance.

Any time fire services are disrupted for longer than the period to test, the backflow prevention assembly technician shall notify the responsible fire department.

.16 The registered backflow prevention assembly technician shall within 15 days on a form approved by Water Works report all test results, repairs made, and replacement of devices. The report shall include a list of materials and replacement parts used, if any; and the state registration number of the technician. Failure to the backflow prevention assembly technician to properly test, repair, or report conditions, or meet registration requirements, could result in notification of the State Health Department.

.17 Water service may be discontinued if the owner or his agent:

Refuses to allow Water Works personnel or the Building Official access to the property for the purposes of inspection or assessment of backflow prevention,

Removes or by-passes a required backflow prevention assembly,

Fails to provide backflow prevention or provides inadequate backflow prevention when a high-hazard cross connection exists.

Fails to properly test, repair or replace a backflow prevention assembly when required, and Fails to comply with the requirements of this Code.

(Ord. 219, 5/1/03; Ord. 234, 6/6/05; Ord. 247, 2/1/07; Ord. 253, 8/2/07; 275, 7/1/09; 279, 3/1/10; 290, 9/11/12; 308 2/10/15)