

ORDINANCE 1908

AN ORDINANCE AMENDING CHAPTER 175 BUILDING CODE, OF THE MUNICIPAL CODE OF THE CITY OF ANKENY, IOWA, BY ADOPTING THE 2015 INTERNATIONAL BUILDING CODE AND 2015 INTERNATIONAL RESIDENTIAL CODE WITH AMENDMENTS

WHEREAS, the City Council of the City of Ankeny, Iowa desires to continue to protect life, safety and property through the adoption and enforcement of construction codes, and to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations;

WHEREAS, the Council now deems it appropriate to revise the Municipal Code by adopting the latest addition of the International Code Council Building Code and Residential Code.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ANKENY, IOWA:

1. That Chapter 175 of the Municipal Code of the City of Ankeny, Iowa, the Building Regulations be repealed and there be enacted in lieu thereof the following Chapter;

CHAPTER 175 BUILDING CODE

Section Number	Title	IBC Section	IRC Section
175.01	Short Title		
175.02	Adoption of Building Code		
175.03	Amendments, modifications, additions and deletions		
175.04	Referenced Codes -- Conflicts		
175.05	Deletions	423.4, 3109	
175.06	Title	101.1	R101.1
175.07	Referenced Codes	101.4	
175.08	Energy	101.4.6	R101.3.1
175.09	Creation of Enforcement Agency	103.1	R103.1
175.10	Required (permits) Platting	105.1	R105.1
175.11	Work exempt from permit	105.2	R105.2
175.12	Expiration	105.5	R105.5
175.13	Revocation of Permit	105.6.1	R105.6.1
175.14	Plan Review Fees	109.2.1	R108.2.1
175.15	Work Commencing Before Permit Issuance	109.4	

175.16	Use & Occupancy		R110.1
175.17	Underground Utility Installation	112.4	R111.4
175.18	Definitions	202	R202
175.19	Climatic and Geographic Design Criteria		Table R301.2(4)A
175.20	Exterior Walls		R302.1
175.21	Two-Family Dwellings		R302.3
175.22	Dwelling/Garage Fire Separation		R302.6
175.23	Dwelling/Garage Separation		Table R302.6
175.24	Fire Protection of Floors (effective January 1, 2018)		R302.13
175.25	Bathrooms (Exhaust)		R303.3
175.26	Basements Ceiling Height - Existing		R305.1.1
175.27	Operational Constraints	1030.4	R310.1.1
175.28	Window Sill Height		R310.2.2
175.29	Emergency Escape Windows Under Decks & Porches		R310.2.4
175.30	Alterations or Repairs of Existing Basements		R310.6
175.31	Floor Elevations For Other Exterior Doors		R311.3.2
175.32	Risers		R311.7.5.1
175.33	Continuity		R311.7.8.2
175.34	Townhouse Automatic Fire Sprinklers Systems		R313.1
175.35	Automatic Fire Sprinkler Systems One & Two Family exception		R313.2
175.36	Frost Protection		R403.1.4.1
175.37	Foundation Walls – lateral support		R404.1
175.38	Foundation Walls For Conventional Light Frame Wood Construction	1807.1.5.1 & Table	R404.1.3.2.3/Table
175.39	Foundation Drainage – sump pumps		R405.3
175.40	Separation (garages)	406.3.4.1	
175.41	Address Identification	501.2	
175.42	Reinforcement Support		R506.2.4
175.43	Supports For Headers		Table R602.7.5
175.44	Basements	903.2.11.1.3	
175.45	Alarms	903.4.2	
175.46	FACP (Fire Alarm Control Panels)	907.1.4	
175.47	Monitoring	907.6.6	
175.48	Corrugated Stainless Steel Tubing		G2414.5.4 (403.5.4)
175.49	CSST		G2415.2 (404.2)
175.50	Freezing		P2603.5
175.51	Sewer Depth		P2603.5.1
175.52	Continuity and Components	1009.2 #11	
175.53	Two-way Communication	1009.8	
175.54	Landings at Doors	1010.1.6.1	
175.55	Hardware	1010.1.9.1	
175.56	Handrails (elevation/#risers)	1011.11	
175.57	Additional Exit Signs	1013.1.1	
175.58	Continuity (handrails)	1014.4#6	
175.59	Access to a Public Way	1028.5.1	
175.60	Window Wells	1030.5.3	
175.61	Energy Efficiency	Chapter 13	Chapter 11 [RE]
175.62	Vinyl Siding (weather-resistive barrier required)	1405.14.2	
175.63	Ground Snow Loads	1608.2	
175.64	Flood Loads	1612.1.1, 1612.1.2	
175.65	Establishment of Flood Hazard Areas	1612.3	
175.66	Frost Protection	1809.5	
175.67	Table 2902.1 footnote ‘e’	T2902.1	
175.68	Small Occupancies	2902.6	

175.01 SHORT TITLE. This chapter shall be known as the Ankeny Building Code, and may be cited as such, and may be referred to herein as this chapter

175.02 ADOPTION OF BUILDING CODE. Pursuant to published notice as required by law, the *International Building Code 2015 Edition*; and the *International Residential Building Code 2015 Edition*, published by the International Code Council, Inc., is adopted in full except for such portions as may be hereinafter deleted, modified or amended. A copy of the International Building Code 2015 Edition as adopted, a copy of the International Residential Code 2015 Edition as adopted and a copy of this chapter are on file in the office of the Code Official.

175.03 AMENDMENTS, MODIFICATIONS, ADDITIONS AND DELETIONS. *The International Building Code, 2015 Edition* (hereinafter known as the IBC), and the *International Residential Code, 2015 Edition* (hereinafter known as the IRC), are amended as hereinafter set out in Sections 175.04 through 175.68.

175.04 REFERENCED CODES - - CONFLICTS. The remaining sections in this chapter represent amendments to the requirements contained in the IBC and IRC. In the event requirements of this code conflict with applicable State and/or Federal requirements, the more stringent shall apply except that all references to flood hazard construction shall be coordinated in concurrence with Ankeny NFIP adoption dated 16-May-1983.

175.05 DELETIONS. The following are deleted from the IBC and are of no force or effect in this chapter:

Subsection 423.4 Group E Occupancies (Storm Shelters)
Section 3109 Swimming Pool Enclosures and Safety Devices

175.06 SECTIONS 101.1 AND R101.1 AMENDED - - TITLE. Sections 101.1, Title, of the IBC and R101.1, Title, of the IRC, are hereby deleted and there is enacted in lieu thereof the following sections:

Section 101.1 Title. These regulations shall be known as the Ankeny Building Code, hereinafter known as “this code.”

Section R 101.1 Title. These provisions shall be known as the Ankeny Residential Code for One- and Two – Family Dwellings, and shall be cited as such and will be referred to herein as “this code.”

175.07 SECTION 101.4 AMENDED - - REFERENCED CODES. Section 101.4, Referenced Codes, of the IBC, is hereby amended by the following subsections:

Section 101.4.1 Gas. Strike ~~International~~ and insert in lieu thereof Ankeny.

Section 101.4.2 Mechanical. Strike ~~International~~ and insert in lieu thereof Ankeny.

Section 101.4.3 Plumbing. Strike ~~International~~ and insert in lieu thereof Ankeny.

Section 101.4.4 Property Maintenance. Strike ~~International Property Maintenance~~ and insert in lieu thereof Ankeny Property Maintenance and Housing.

Section 101.4.5 Fire Prevention. Strike ~~International~~ and insert in lieu thereof Ankeny.

Section 101.4.6 Energy. Strike ~~International~~ and insert in lieu thereof Ankeny.

Section 101.4.7 Existing Buildings. Strike ~~International~~ and insert in lieu thereof Ankeny.

175.08 SECTION 101.4.6 AMENDED AND R101.3.1 ADDITION - - ENERGY. Section 101.4.6, Energy, of the IBC, is hereby amended by deleting said sections and inserting in lieu thereof the following section and Section R101.3.1, Intent, of the IRC, is hereby established by adding the following section:

Section 101.4.6 Energy and Section R101.3.1 Intent. The provisions of the International Energy Conservation Code as currently adopted and amended by the Iowa State Building Code Bureau shall apply to all matters governing the design and construction of buildings for energy efficiency. Administration shall be as prescribed in “this code” and these regulations shall be known as the Ankeny Energy Code. Construction or work for which a permit is required shall be subject to 3rd party inspections. The Building Official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability. Any portion that does not comply shall be corrected and such portion shall not be covered or concealed until authorized by the Building Official.

175.09 SECTIONS 103.1 AND R103.1 AMENDED - - CREATION OF ENFORCEMENT AGENCY. Section 103.1, Creation of enforcement agency, of the IBC and R103.1, Creation of enforcement agency, of the IRC, are hereby amended by adding the following paragraph:

Sections 103.1 and R103.1 Building and Zoning Administrator The term Building Official is intended to also mean the Building and Zoning Administrator, who shall be designated by the Planning & Building Director and shall hereinafter be referred to as Code Official and his or her representatives or designees, who are herewith delegated the same powers, authorities, duties and responsibilities as designated for the Code Official. The Code Official when so appointed, shall be responsible for the enforcement of the Building Code; the Mechanical code; the Housing code; the Plumbing code; the Gas Code, the Energy code, the Electrical code, the Zoning code and the Fire code of the city. The Code Official shall have authority to file a complaint in any court of competent jurisdiction charging a person with the violation of this title. The Code Official shall have whatever additional duties the Director of Planning & Building may prescribe.

175.10 SECTIONS 105.1 AND R105.1 ADDITION - - (PERMITS) REQUIRED. Sections 105.1, Required, of the IBC and R105.1, Required, of the IRC, are hereby amended by adding the following to said sections:

Sections 105.1 and R105.1 Platting required. A building permit shall not be issued unless the land upon which the proposed work is to be done is platted pursuant to the provisions of the subdivision regulations. A building permit shall not be issued permitting the construction of any building or other structure on any lot designated on any plat as an outlot, without such lot being replatted in accordance with the provisions of the subdivision regulations. Such platting may be waived by the city council if that body determines that no portion of the land is needed for public purposes or if that portion needed for public purposes, as determined by the council, is dedicated to the city; provided further, that such platting may be waived by the zoning administrator if the requested building permit is for one of the following purposes:

1. Any accessory structure or addition for a one or two family residence;
2. The removal, repair or alteration of a structure on unplatted premises, provided that there is no change in the use classifications of such structure;
3. The term "alteration" shall be deemed to mean any change or modification of a structure that does not serve to increase the size of the original structure by more than ten percent.

175.11 SECTIONS 105.2 AND R105.2 AMENDED - - WORK EXEMPT FROM PERMIT.

Sections 105.2, Work exempt from permit, of the IBC and R105.2, Work exempt from permit, of the IRC are hereby amended by deleting the following items and adding a sentence to said sections as follows:

Sections 105.2 and R105.2 Work Exempt From Permit

Section 105.2 Building - Item #1	Detached structures not exceeding 120 sq. ft.	Delete
Section 105.2 Building - Item #2	Fences not over 7 feet high	Delete
Section 105.2 Building - Item #6	Sidewalks and driveways	Delete

Section 105.2 Building - Item #9	Prefabricated swimming pools	Delete
Section 105.2 Building - Item #10	Shade cloth structures	Delete
Section R105.2 Building - Item #1	Detached structures not exceeding 200 sq. ft.	Delete
Section R105.2 Building - Item # 2	Fences not over 7 feet high	Delete
Section R105.2 Building - Item #5	Sidewalks and driveways	Delete
Section R105.2 Building - Item #7	Prefabricated swimming pools	Delete
Section R105.2 Building - Item #10	Decks not exceeding 200 sq. ft.	Delete

Exemption from permit requirements of this chapter shall not preclude requirements for permitting of plumbing, electrical and mechanical installations and systems or compliance with Ankeny Code of Ordinances.

175.12 SECTIONS 105.5 AND R105.5 AMENDED - - EXPIRATION. Sections 105.5, Expiration, of the IBC and R105.5, Expiration, of the IRC, are hereby amended by deleting said sections and inserting in lieu thereof the following:

Sections 105.5 and R105.5 12 Month Expiration Every permit issued under the provisions of this Code shall expire twelve (12) months from the date of issue, unless the application is accompanied by a construction schedule of specific longer duration, in which instance the permit may be issued for the term of the construction schedule, with approval of the Code Official. If the work has not been completed by the expiration date of the permit, no further work shall be done until the permit shall have been renewed by the owner or his or her agent and by payment of the renewal fee as established by Resolution of the City Council, and provided no changes have been made in plans or location. Upon approval, permits may be extended for no more than two periods not exceeding 180 days each.

175.13 SECTIONS 105.6.1 AND R105.6.1 ADDITION - - REVOCATION OF PERMIT. Sections 105.6.1 Revocation of Permit, of the IBC and R105.6.1, Revocation of Permit, of the IRC, are hereby established by adding the following sections:

Sections 105.6.1 and R105.6.1 Revocation of Permit It is the responsibility of the permit holder to schedule the required inspections and obtain final approval. Failure to schedule the required inspections and receive approval of work authorized by the permit before covering said work or at completion shall result in revocation of the permit and void any associated approvals granted by the City. This failure shall also equate to working without a permit in violation of City ordinance and no future permits shall be issued to any person or company who has outstanding violations of this code or any other laws or ordinances of the City. Failure to contact the City for any inspection or follow-up prior to expiration of a permit shall be deemed a violation of this code section. Failure to contact the City for any inspection or follow-up prior to expiration of a Temporary Certificate of Occupancy shall also be deemed a violation of this code section. Allowing occupancy of a structure, for which a person or company holds a building permit, prior to or without a valid Certificate of Occupancy (temporary or final) shall be deemed a violation of this code section and no future permits shall be issued to any person or company who has outstanding violations of this code or any other laws or ordinances of the City.

175.14 SECTIONS 109.2.1 AND R108.2.1 ADDITION - - PLAN REVIEW FEES. Sections 109.2.1, Plan review fees, of the IBC, and R108.2.1, Plan review fees, of the IRC, are hereby established by adding the following sections:

Sections 109.2.1 and R108.2.1 Plan review fees Fees for all plan reviews shall be as set forth and established by resolution of the City Council. All such fees shall be paid in accordance with the terms and requirements of such resolution or as the same may be amended by the City Council from time to time.

175.15 SECTIONS 109.4 AND R108.6 ADDITION - - WORK COMMENCING BEFORE PERMIT ISSUANCE. Sections 109.4, Work commencing before permit issuance, of the IBC, and R108.6, Work commencing before permit issuance, of the IRC, are hereby established by adding the following sentence after said sections:

Sections 109.4 and R108.6 Work commencing before permit issuance Said fee shall be 100 percent of the usual permit fee in addition to the required permit fees.

175.16 SECTION R110.1 AMENDED - - USE AND OCCUPANCY. Section R110.1, Use and occupancy, of the IRC, is hereby amended by deleting exception #2 - Accessory buildings or structures.

175.17 SECTION 112 AND R111 ADDITION - - UNDERGROUND UTILITY INSTALLATION. Sections 112.4, Service Utilities, of the IBC, and R111.4, Service Utilities, of the IRC, are hereby established by adding the following sections:

Sections 112.4 and R111.4 Underground utility installation All electrical service lines not exceeding four hundred eighty volts and all telephone and cablevision service lines, as well as other utility lines serving any new building or structure, including signs and billboards, requiring permanent electrical service shall be placed underground unless a waiver from such is approved by the city engineer.

The provisions of this section shall not apply to existing buildings or additions to such buildings. Nothing in this section shall be deemed to apply to temporary service when defined as such by the utility company.

175.18 SECTION R202 AMENDED - - DEFINITIONS. Section 202, Definitions, of the IBC, and Section R202 Definitions, of the IRC, are hereby amended by deleting the definition of accessory structure, swimming pool and townhouse and inserting in lieu thereof the following:

Section 202 Swimming Pool Any structure intended for swimming, recreational bathing or wading that is capable of containing water over 24 inches deep. This includes in-ground, above-ground and on-ground pools; hot tubs; spas and fixed-in-place wading pools, but excludes manmade lakes or ponds created through the collection of storm water or drainage runoff.

Section R202 Accessory Structure Accessory structures shall be defined as and shall conform to applicable zoning requirements and shall include but not be limited to structures and equipment with a fixed location on the ground, including wind energy systems, generators and equipment shelters.

Section 202 and R202 Townhouse A single-family dwelling unit constructed in groups of three or more attached units in which each unit extends from foundation to roof. Townhouse groups of more than twelve units shall have a yard or public way on at least two sides.

175.19 TABLE R301.2(4)A AMENDED - - CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA. Table R301.2(1), Climatic and Geographic Design Criteria, of the IRC, is hereby amended by modifying said table and adding footnote (n) as follows :

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

Ground Snow Load	Wind Design		Seismic Design Category	Subject To Damage From			Winter		Flood Hazards	Air Freezing Index	Mean Annual Temp.
	Speed MPH	Topographic Effects		Weathering	Frost Line Depth	Termite	Design Temp	Ice Barrier Req'd.	NFIP Adoption		
*30 PSF	115 (51)	NO	A	Severe	42"	No	-5° F	Yes	16-May-83	1833	48.6

*n – see 175.63 – minimum flat roof snow load 24 PSF

175.20 SECTION R302.1 AMENDED - - EXTERIOR WALLS. Section R302.1, Exterior walls, of the IRC, is hereby amended by deleting all exceptions and inserting in lieu thereof the following exception:

Section R302.1 Exterior walls exception #1 Accessory buildings less than six feet (6') from a dwelling and/or less than 3 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 six feet (6') from dwelling unit wall(s) shall be fire rated in accordance with this code.

175.21 R302.3 AMENDED - - TWO-FAMILY DWELLINGS. Section R302.3 Two-family dwellings, of the IRC, is hereby amended by deleting said section and exceptions and inserting in lieu thereof the following section:

R302.3 Two-family dwellings For purposes of fire-resistive separation, two-family dwelling units shall be considered as townhouses and shall be constructed in accordance with R302.2

Exception 2 deleted

175.22 SECTION R302.6 AMENDED - - DWELLING/GARAGE FIRE SEPARATION. Section R302.6, Dwelling/garage fire separation, of the IRC, is hereby amended by deleting said section and inserting in lieu thereof the following section:

Section R302.6 Dwelling/garage fire separation The garage shall be separated throughout as required by Table R302.6. Openings in garage walls shall comply with section R302.5.

175.23 SECTION TABLE R302.6 AMENDED - - DWELLING/GARAGE SEPARATION. Table R302.6 Dwelling/Garage Separation, of the IRC, 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 six feet (6') from a dwelling unit(s) on the same lot	5/8" "X" fire code sheetrock or equivalent – throughout garage

175.24 AMENDED - - FIRE PROTECTION OF FLOORS. Section R302.13, Fire Protection of Floors, of the IRC, shall be of no force or effect until January 1, 2018, at which time Section R302.13, Fire Protection of Floors, of the IRC, shall be enforceable, including the following amendment:

Section R302.13, Fire Protection of Floors, of the IRC, is hereby amended by deleting exception 4 and inserting in lieu thereof the following:

Section R302.13 exception 4 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 26 minutes using ASTM E119 standard fire endurance testing with a superimposed load simulating a maximum load condition (i.e. 100% design load).

175.25 SECTION R303.3 AMENDED - - BATHROOMS. Section R303.3, 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:

Section R303.3 Bathrooms Bathrooms shall be provided with a mechanical ventilation system. The minimum ventilation rates shall be 50 cfm for intermittent ventilation or 20 cfm for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

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

175.26 SECTION R305.1.1 AMENDED - - BASEMENTS. Section R305.1.1 Basements, of the IRC, is amended deleting the exception and inserting in lieu thereof:

Section R305.1.1 exception Existing basements not having a height as specified in this section are allowed to be finished with a ceiling height that is not decreased more than the minimal measurement created by applying a finished ceiling of gypsum board or acoustical ceiling tiles.

175.27 SECTIONS 1030.4 AND R310.1.1 ADDITION - - OPERATIONAL CONSTRAINTS. Sections 1029.4, Operational Constraints, of the IBC and R310.1.1, Operational constraints, of the IRC, are hereby amended by adding the following:

Sections 1030.4 and R310.1.1 Operational Constraints The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside and shall not require the removal of a sash or other component of the emergency escape and rescue opening.

175.28 SECTION R310.2.2 ADDITION - - WINDOW SILL HEIGHT. Section R310.2.2 of the IRC, is hereby amended by adding the following exception:

Section R310.2.2 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.

175.29 SECTION R310.2.4 AMENDED - - EMERGENCY ESCAPE WINDOWS UNDER DECKS AND PORCHES. Section R310.4, Emergency escape windows under decks and porches, of the IRC, is hereby amended by adding a new sentence following this section:

Section R310.4 Emergency escape windows under decks and porches Cantilever areas of all construction elements shall be regulated in accordance with this section.

175.30 SECTION R310.6 AMENDED - - ALTERATIONS OR REPAIRS OF EXISTING BASEMENTS. Section R310.6 Alterations or Repairs of Existing Basements, of the IRC, is hereby amended by deleting said section and exception and inserting in lieu thereof the following:

Section R310.6 Alterations or Repairs of Existing Basements An emergency escape and rescue opening is required in all existing basements undergoing alterations or repairs.

175.31 SECTION R311.3.2 AMENDED - - FLOOR ELEVATIONS FOR OTHER EXTERIOR DOORS. Section R311.3.2 Floor Elevations for Other Exterior Doors of the IRC is amended by deleting the exception and inserting in lieu thereof:

Section R311.3.2 exception A top landing is not required where a stairway of not more than four risers is located on the exterior side of a door, provided the door does not swing over the stairway.

175.32 SECTION R311.7.5.1 AMENDED - - RISERS. Section R311.7.5.1, Riser height, of the IRC, is hereby amended by adding the following exceptions:

Section R311.7.5.1 Riser height exception 3 The maximum riser height shall be 7 3/4 inches. The riser height shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch, except at the top or bottom riser of any interior stair where this dimension may deviate by a maximum of 1 inch. In no case shall the risers exceed the maximum height of 7 3/4 inches.

Section R311.7.5.1 Profile exception 4 The opening between adjacent treads is not limited on exterior stairs serving individual dwelling units.

175.33 SECTION R311.7.8.2 ADDITION - - CONTINUITY. Section R311.7.8.2, Continuity, of the IRC, is hereby amended by adding the following exception:

Section R311.7.8.2 Continuity exception 3 Handrails within a dwelling unit or serving an individual dwelling unit shall be permitted to be interrupted at one location in a straight stair when the rail terminates into a wall or ledge and is offset and immediately continues.

175.34 SECTION R313.1 AMENDED - - TOWNHOUSE AUTOMATIC FIRE SPRINKLER SYSTEMS. Section R313.1 Townhouse automatic fire sprinkler system, of the IRC, is hereby amended by adding the following exceptions (existing exception 1 remains unchanged):

Section R313.1 Townhouse automatic fire sprinkler systems. Exceptions:

2. An automatic residential fire sprinkler system shall not be required where *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed.
3. Townhouse structures that contain eight (8) or less dwelling units.
4. Townhouse structures less than eighteen thousand (18,000) square feet floor space, exclusive of any garages.

175.35 SECTION R313.2 AMENDED - - ONE- AND TWO-FAMILY DWELLINGS AUTOMATIC FIRE SYSTEMS. Section R313.2 One- and two-family automatic fire sprinkler systems, of the IRC, is hereby amended by adding the following exception:

Section R313.2 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 (exclusive of attached garage area), does not exceed 8,000 square feet.

175.36 SECTION R403.1.4.1 - - AMENDED - - FROST PROTECTION. Section R403.1.4.1, of the IRC, is hereby amended by deleting all existing exceptions and inserting in lieu thereof the following exception #1 and exception #2:

Section R403.1.4.1 Frost protection exception 1 Detached garages of light frame wood construction of 1,010 square feet or less in size and detached garages of 400 square feet or less in size of other than light frame wood construction and more than 10 feet from a dwelling or attached garage may be provided with a floating slab. The floating slab shall include a thickened slab edge of a minimum twelve (12) inches thick. Six inches of the thickened slab shall be below grade and six inches shall be above finished grade. The bottom portion of the thickened slab area shall be twelve (12) by twelve (12) inches. Two #4 rebar shall be placed within the thickened edge continuous around the perimeter of the slab. Floors shall be of Portland cement concrete not less than 4 inches thick. Garages areas shall have all sod and/or debris removed prior to installation of said floor.

Section R403.1.4.1 Frost protection exception 2 Decks not supported by a dwelling and not greater than thirty inches (30”) above grade plane need not be provided with footings that extend below the frost line.

175.37 SECTION R404.1 AMENDED - - CONCRETE AND MASONRY FOUNDATION WALLS. Section R404.1, Concrete and masonry foundation walls, of the IRC, is hereby amended by adding the following paragraph:

Section R404.1 Concrete and masonry foundation walls lateral support Prior to backfill and prior to a poured in place floor slab to provide bottom lateral support the following may be provided (1) a full depth (minimum 1-1/2”) nominal 2” x 4” keyway may be formed into the footings to secure the bottom of the foundation wall -or- (2) 36” long vertical # 4 rebar may be embedded a minimum of 6” into the footings not to exceed 7’ o.c. spacing

175.38 SECTIONS 1807.1.5.1 AND R404.1.3.2.3 ADDITION - - FOUNDATION WALLS FOR CONVENTIONAL LIGHT FRAME WOOD CONSTRUCTION. Sections 1807.1.5.1, Foundation Walls For Conventional Light Frame Wood Construction, of the IBC and R404.1.3.2.3, Foundation Walls For Conventional Light Frame Wood Construction, of the IRC, are hereby established by adding the following sections and table:

Sections 1807.1.5.1 and R404.1.3.2.3 Foundation Walls for Conventional Light Frame Wood Construction As an alternate to the requirements of respective codes the following Table ‘Foundation Walls for Conventional Light Frame Construction’ may be used:

Table - 'Foundation Walls for Conventional Light Frame Construction'

Height of Foundation Wall (Net measured from top of basement slab to top of foundation wall)*		Thickness of Foundation Walls		Reinforcement type and placement within Foundation Wall**	Reinforcement type and placement within Foundation Wall** (maximum 12' span between corners and supporting cross walls.)	Type of Mortar
Gross	Net	Concrete	Masonry			
8	7' 8"	7 1/2"	8"	1/2" horizontal bars, placement in the middle, and near the top & bottom – 1/2" bars @ 6' max. vertically	0.075 square inch bar 8' o.c. vertically in fully grouted cells. If block is 12" nominal thickness, may be unreinforced.	Type M or S. Grout & Mortar shall meet provisions of Chapter 21 IBC
9	8' 8"	8"	See Chapter 18 IBC	1/2" bars 2' o.c. horizontally & 20" vertically o.c.	See Chapter 18 IBC	Same as above
10	9' 8"	8"	See Chapter 18 IBC	(5/8" bars 2' o.c. horizontally & 30" vertically o.c.)	See Chapter 18 IBC	Same as above
*Concrete floor slab to be nominal 4". If such floor slab is not provided prior to backfill, provide 1) 36" vertical #4 rebar embedded in the footing @ maximum 7' O.C. spacing -and/or- 2) full depth nominal 2" depth x 4" width keyway in footing						
** All reinforcement bars shall meet ASTM A6175 grade 40 minimum and be deformed. Placement of bars shall be in center of wall and meet the provisions of 18, 19, and 21 of the International Building Code.						
NOTE: Cast in place concrete shall have a compressive strength of 3,000 lbs @ 28 days. Footings shall contain continuous reinforcement of 2 – 1/2" diameter rebar throughout. Placement of reinforcement and concrete shall meet the requirements of Chapter 19 of the International Building Code.						
NOTE: Material used for backfilling shall be carefully placed granular soil of average or high permeability and shall be drained with an approved drainage system as prescribed in Section 1805.4 of the International Building Code. Where soils containing a high percentage of clay, fine silt or similar materials of low permeability or expansive soils are encountered or where backfill materials are not drained or an unusually high surcharge is to be placed adjacent to the wall, a specially designed wall shall be required.						
Note: Foundation plate or sill anchorage shall be installed in accordance with the respective codes as applicable.						

175.39 SECTION R405 ADDITION - - FOUNDATION DRAINAGE. Section R405, Foundation Drainage, of the IRC, is hereby amended by adding a new section as follows:

Section R405.3 Sump Pumps Footing drains and drainage systems shall be discharged to a sump pump plumbed to a discharge system separated from the sanitary sewer and in accordance with the standard specifications adopted by the City Council. Exceptions may be granted by the Code Official in accordance with said engineering standards based on local conditions as determined by the Ankeny Public Works Department/Development Engineering Division or Storm Water Coordinator.

175.40 SECTION 406.3.4.1 AMENDED - - DWELLING UNIT SEPARATION. Section 406.3.4.1, Separation, of the IBC, is hereby amended by deleting section #1 and inserting in lieu thereof the following:

Section 406.3.4.1 Dwelling Unit Separation The private garage shall be separated from the dwelling unit and its attic area by means of minimum 5/8-inch type "X" fire code gypsum board or equivalent applied to the garage side. Where the separation is a floor-ceiling assembly, the structure supporting the separation shall also be protected by not less than 5/8-inch type "X" fire code gypsum board or equivalent throughout. Garages beneath habitable rooms shall be separated by not less than 5/8-inch type "X" fire

code gypsum board or equivalent throughout. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8" thick, or doors in compliance with 716.5.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Doors shall be self-closing and self-latching.

175.41 SECTION 501.2 AMENDED - - ADDRESS IDENTIFICATION. Section 501.2, Address Identification, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following section and table:

501.2 Address identification.

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 501.2
Minimum Height and Stroke Width^{a b}

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

^a Exterior suite identification, minimum height shall be 4 inches and stroke width shall be 1/2 inch.

^b Interior suite identification, minimum height shall be 2 inches and stroke width shall be 1/4 inch.

175.42 SECTION R506.2.4 ADDITION - - REINFORCEMENT SUPPORT. Section R506.2.4, of the IRC, Reinforcement support is hereby amended by addition of the following exception:

Section R506.2.4 Reinforcement support exception 1 Non-structural slabs

175.43 SECTION R602.7.5 AMENDED - -SUPPORTS FOR HEADERS. Section R602.7.5, Of the IRC, Supports for Headers is hereby amended by deleting Table R602.7.5 and inserting in lieu thereof the following Table R602.7.5

Table R602.7.5
Minimum Number Of Full Height Studs At Each End of Headers In Exterior Walls

Maximum Header Span (feet)	Where Jack Studs Provided	Framing Anchors in Lieu of Jack Studs
4	1	1
6	1	2

8	1	2
10	2	3
12	2	3
14	2	3
16	2	4
18	2	4

175.44 SECTION 903.2.11.1.3 AMENDED - - BASEMENTS. Section 903.2.11.1.3, Basements, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Section 903.2.11.1.3 Basements Where any portion of a *basement* is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, the *basement* shall be equipped throughout with an *approved automatic sprinkler system*.

175.45 SECTION 903.4.2 AMENDED - - ALARMS. Section 903.4.2, Alarms, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following section:

Section 903.4.2 Alarms *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.

175.46 SECTION 907.1.4 ADDITION - - FACP (Fire Alarm Control Panels). Section 907.1.4, FACP) Fire Alarm Control Panels) 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 1 FACP. Installation of fire alarm panel shall be not exceed six feet 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 or the limitation in the number of panels.

175.47 SECTION 907.6.6 AMENDED - - MONITORING. Section 907.6.6, Monitoring, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following section and exception:

Section 907.6.6 Monitoring Fire alarm systems required by this chapter or 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 one- and two- family dwellings.

175.48 SECTION G2414.5.3 (403.5.4) AMENDED - - CORRUGATED STAINLESS STEEL TUBING. 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:

Section G2414.5.3 (403.5.4) Corrugated Stainless Steel Tubing Arc resistant corrugated stainless steel tubing shall be listed in accordance with ANSI LC 1 (Optional Section 5.16)/CSA 6.26.

175.49 SECTION G2415.2 (404.2) AMENDED - - CSST. Section G2415.2 (404.2) CSST, of the IRC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Section G2415.2 (404.2) CSST. 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.

175.50 SECTION P2603.5 AMENDED - - FREEZING. Section P2603.5 Freezing, of the IRC, is hereby amended by deleting the last sentence of said section and inserting in lieu thereof the following:

Section P2603.5 Freezing Exterior water supply system piping shall be installed not less than sixty (60) inches below grade.

175.51 SECTION P2603.5.1 AMENDED - - SEWER DEPTH. Section P2603.5.1 Sewer Depth, of the IRC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Section P2603.5.1 Sewer Depth Building sewers shall be a minimum of forty-eight (48) inches below grade.

175.52 SECTION 1009.2 ADDITION - - CONTINUITY AND COMPONENTS. Section 1009.2, Continuity and Components, Of the IBC, is hereby amended by adding the following #11 to said section:

Section 1009.2 Continuity and Components #11 Components of exterior walking surfaces shall be concrete, asphalt or other approved hard surface.

175.53 SECTION 1009.8 ADDITION - - TWO-WAY COMMUNICATION. Section 1009.8, Two-way Communication, of the IBC, is hereby amended by adding the following exception:

Section 1009.8 exception 6 Two-way communication systems are not required for elevators that serve two story buildings designed to meet the provisions of section IBC 712.1.9, Two-story Openings and IBC 1019, Exit Access Stairways and Ramps.

175.54 SECTION 1010.1.6 ADDITION - - LANDINGS AT DOORS. Section 1010, Doors, Gates and Turnstiles, of the IBC, is hereby amended by adding the following section:

Section 1010.1.6.1 Landings at Doors for landings required by Section 1010.1.6 to be at the same elevation on each side of the door exterior landings at doors shall be provided with frost protection.

175.55 SECTION 1010.1.9.1 ADDITION - - HARDWARE. Section 1010.1.9.1 is hereby amended by adding a new sentence following this section:

Section 1010.1.9.1 Hardware Thumb turn locks shall not be allowed.

175.56 SECTION 1011.11 AMENDED - - HANDRAILS. Section 1011.11, Handrails, of the IBC is hereby amended by deleting exception 4 and inserting in lieu thereof the following:

Section 1011.11 Handrails exception 4 Changes in elevation of four or more risers within individual units of Group R-2 and R-3 occupancies require a handrail on at least one side.

175.57 SECTION 1013.1.1 ADDITION - - ADDITIONAL EXIT SIGNS. Section 1013.1.1, Additional Exit Signs, of the IBC, is hereby established by adding the following section:

Section 1013.1.1 Additional Exit Signs Exit signs may be required at the discretion of the Code Official to clarify an exit or exit access.

175.58 SECTION 1014.4 ADDITION - - (HANDRAIL) CONTINUITY. Section 1014.4, Continuity, of the IBC, is hereby amended by adding the following exception:

Section 1014.4 Continuity exception 6 Handrails within a dwelling unit or serving an individual dwelling unit of groups R-2 and R-3 shall be permitted to be interrupted at one location in a straight stair when the rail terminates into a wall or ledge and is offset and immediately continues.

175.59 SECTION 1028.5 ADDITION - - ACCESS TO A PUBLIC WAY. Section 1028.5, Access to a Public Way, Of the IBC, is hereby amended by adding the following section:

Section 1028.5.1 Access to a Public Way Components of exterior walking surfaces shall be concrete, asphalt or other approved hard surface.

175.60 SECTION 1030.5 - - WINDOW WELLS. Sections 1030.5, Window Wells, of the IBC, is hereby amended by adding the following section:

Sections 1030.5.3 Window well drainage All window wells shall be provided with approved drainage.

175.61 CHAPTER 13 ENERGY EFFICIENCY AND CHAPTER 11 [RE] AMENDED - - ENERGY EFFICIENCY. Chapter 13, Energy Efficiency, of the IBC and Chapter 11 [RE], Energy Efficiency, of the IRC, are hereby amended by deleting said chapters and inserting in lieu thereof the following:

Chapter 13 Energy Efficiency (IBC) and Chapter 11 (IRC). The provisions of the International Energy Code as currently adopted and amended by the Iowa State Building Code Bureau shall apply to all matters governing the design and construction of buildings for energy efficiency. Administration shall be as prescribed in “this code” and these regulations shall be known as the Ankeny Energy Code.

175.62 SECTION 1405.14 ADDITION - - VINYL SIDING. Section 1405.14, Vinyl Siding, of the IBC, is hereby amended by adding a new section as follows:

Section 1405.14.2 Water-Resistive Barrier Required An approved water-resistive barrier shall be provided under all vinyl siding.

175.63 SECTION 1608.2 ADDITION - - GROUND SNOW LOADS. Section 1608.2, Ground Snow Loads, of the IBC, is hereby amended by adding the following sentence to said section:

Section 1608.2 Ground Snow Load The ground snow load to be used in determining the design snow load for roofs is hereby established at 30 pounds per square foot. Subsequent increases or decreases shall

be allowed as otherwise provided by code, except that the minimum allowable flat roof snow load may be reduced to not less than 80 percent of the ground snow load.

175.64 SECTION 1612 AMENDED - - FLOOD LOADS. Section 1612, Flood Loads, of the IBC, is hereby amended by adding the following sections:

Section 1612.1.1 General Floodplain Construction Standards The following standards are established for construction occurring within the one-hundred-year flood elevation:

A. All structures shall:

1. Be adequately anchored to prevent flotation, collapse or lateral movement of the structure;
2. Be constructed with materials and utility equipment resistant to flood damage; and
3. Be constructed by methods and practices that minimize flood damage.

B. Residential buildings: All new or substantially improved residential structures shall have the lowest floor, including basement, elevated a minimum of one foot above the one-hundred-year flood level. Construction shall be upon compacted fill which shall, at all points, be no lower than one foot above the one-hundred-year flood level and extend at such elevation at least eighteen feet beyond the limits of any structure erected thereon. Alternate methods of elevating (such as piers) may be allowed, subject to favorable consideration by the Code Official where existing topography, street grades, or other factors preclude elevating by fill. In such cases, the methods used must be adequate to support the structure as well as withstand the various forces and hazards associated with flooding.

C. Nonresidential buildings: All new or substantially improved nonresidential buildings shall have the first floor (including basement) elevated a minimum of one foot above the one-hundred-year flood level, or together with attendant utility and sanitary systems, be floodproofed to such a level.

D. When floodproofing is utilized, a professional engineer registered in the State of Iowa shall certify that the floodproofing methods used are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the one-hundred-year flood; that the structure, below the one-hundred-year flood level, is watertight with walls substantially impermeable to the passage of water. A record of the certification indicating the specific elevation (in relation to mean sea level) to which any structures are floodproofed shall be maintained by the Code Official.

E. Mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements are that:

1. Over-the-top ties be provided at each of the four corners of the mobile home with two additional ties per side at intermediate locations for mobile homes 50 feet or more in length or one such tie for mobile homes less than 50 feet in length;
2. Frame ties be provided at each corner of the home with five additional ties per side at intermediate points for mobile homes 50 feet in length;
3. All components of the anchoring system be capable of carrying a force of four thousand eight hundred pounds; and
4. Any additions to the mobile home be similarly anchored.

F. Mobile homes shall be placed on lots or pads elevated by means of compacted fill so that the lowest floor of the mobile home will be a minimum of one foot above the one-hundred-year flood level. In addition, the tie-down specification of Section 175.04.350 section E must be met and adequate surface drainage and access for a hauler must be provided.

G. New mobile homes, expansions to existing mobile homes and mobile home lots where the repair, reconstruction or improvement of the streets, utilities, and pads equals or exceeds fifty percent before the repair, reconstruction or improvement has commenced shall provide:

1. Lots or pads that have been elevated by means of compacted fill so that the lowest floor of mobile homes will be a minimum of one-foot above the one-hundred-year flood level;
2. Ground anchors for mobile homes.

H. Storage of materials and equipment that are flammable, explosive or injurious to human, animal or plant life is prohibited unless elevated a minimum of one foot above the one-hundred-year flood level. Other material and equipment must either be similarly elevated or:

1. Not be subject to major flood damage and be anchored to prevent movement due to flood waters; or
2. Be readily removable from the area within the time available after flood warning.

Section 1612.1.2 Special floodway standards.

The following standards are established for construction occurring within a designated floodway.

A. Structures, buildings and sanitary and utility systems, if permitted, shall meet the applicable general floodplain standards and shall be constructed or aligned to present the minimum possible resistance to flood flows.

B. Buildings, if permitted, shall have a low flood damage potential and shall not be for human habitation.

175.65 SECTION 1612.3 AMENDED - - ESTABLISHMENT OF FLOOD HAZARD AREAS.

Section 1612.3, Establishment of Flood Hazard Areas, of the IBC, is hereby amended by inserting the following:

Section 1612.3 Establishment of Flood Hazard Areas

Insert Jurisdiction: City of Ankeny

Insert Date: 16-May-83

175.66 SECTION 1809.5 ADDITION - - FROST PROTECTION. Section 1809.5, Frost Protection, of the IBC, is hereby amended by adding the following exception 4:

Exception 4 Detached garages, accessory to Group R-2 and R-3 occupancies, 1010 square feet or less in size of light frame wood construction and detached garages of 400 square feet or less in size of other than light frame wood construction 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 8 inches thick and tapered or squared from a width of 6 inches to 12 inches and have floors of Portland cement concrete not less than 4 inches thick. Garage areas shall have all sod and/or debris removed prior to installation of said floor.

175.67 TABLE 2902.1 AMENDED - - MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES. Table 2902.1 Minimum Number of Required Plumbing Fixtures, of the IBC, is hereby amended by deleting footnote 'e' and inserting in lieu thereof the following.

Footnote 'e' For business occupancies with an occupant load of not more than thirty (30) and mercantile occupancies with an occupant load of not more than one hundred (100), service sinks shall not be required.

175.68 SECTION 2902.6 AMENDED - - SMALL OCCUPANCIES. Section 2902.6, of the IBC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Section 2902.6 Small Occupancies Water dispensers in accessible locations and within accessible reach ranges may be substituted for the initial drinking fountains in business occupancies with an occupant load of not more than thirty (30) and mercantile occupancies with an occupant load of not more than one hundred (100). (re: IBC chapter 11, IPC 410.2)

2. Repeal. All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

3. Effective date. This ordinance shall be effective July 1, 2017, after its final passage and publication as required by law.

PASSED AND APPROVED this _____ day of _____, 2017.

Gary Lorenz, Mayor

ATTEST:

Pamela DeMouth, City Clerk

**PUBLISHED IN THE
DES MOINES REGISTER
ON THE _____ DAY OF _____, 2017**

**1st Con 5/15/17
2nd Con 6/5/17
3rd Con _____**