ORDINANCE NO. 1666

AN ORDINANCE AMENDING TITLE 175 BUILDING AND PROPERTY REGULATIONS, OF THE MUNICIPAL CODE OF THE CITY OF ANKENY, IOWA, BY ADOPTING THE 2009 INTERNATIONAL BUILDING CODE AND 2009 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 That Chapter 175 of the Municipal Code of the City of Ankeny, Iowa, the Building Regulations be repealed and there be enacted in lieu thereof the following Chapter;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 - - Deletions		
175.05	Referenced Codes -- Amendments, Modifications, Additions and Deletions		
175.06	Title	101.1	R101.1
175.07	Gas	101.4.1	
175.08	Creation of Enforcement Agency	103.1.	R103.1
175.09	Deputies	103.3	R103.3
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	Plan Review Fees	109.2.1	R108.2.1

175.14	Use & Occupancy		R110.1
175.15	Underground Utility Installation	112.4	R111.4
175.16	Definitions		R202
175.17	Climatic and Geographic Design Criteria		Table R301.2
175.18	Exterior Walls		R302.1
175.19	Exterior Walls		Table R302.
175.20	Townhouses		R302.2
175.21	Townhouses		R302.2A
175.22	Two-Family Dwellings		R302.3
175.23	Opening Protection (garages)		R302.5.1
175.24	Dwelling/Garage Fire Separation		R302.6
175.25	Dwelling/Garage Separation		Table R302.6
175.26	Bathrooms (Exhaust)		R303.3
175.27	Separation (garages)	406.1.4 #1	
175.28	Emergency Escape and Rescue Required (basements)		R310.1
175.29	Operational Constraints	1029.4	R310.1.4
175.30	Window Wells	1029.5.3	R310.2.2
175.31	Emergency Escape Windows Under Decks & Porches		R310.5
175.32	Risers (deviation)		R311.7.4.1
175.33	Profile (opening between treads - exterior stairs)		R311.7.4.3
175.34	Continuity (handrail configuration)		R311.7.7.2
175.35	Automatic Fire Sprinkler Systems Townhomes exception		R313.1
175.36	Automatic Fire Sprinkler Systems One & Two Family exception		R313.2
175.37	Frost Protection		R403.1.4.1
175.38	Foundation Walls – lateral support		R404.1
175.39	Foundation Walls For Conventional Light Frame Wood Construction	1807.1.5.1 & 7	R404.1.2.2.3
175.40	Foundation Drainage – sump pumps		R405.3
175.41	Reinforcement Support		R506.2.4
175.42	Single & multiple-station smoke alarms	907.2.11	
175.43	Re-covering versus Replacement – asphalt shingles		R907.3
175.44	Foundation and Supports – mechanical equipment		M1403.2
175.45	Continuity and Components	1007.2 #9	
175.46	Doors, Gates and Turnstiles (frost protection)	1008.1.6.1	
175.47	Handrails (elevation/#risers)	1009.12	
175.48	Continuity (handrails)	1012.4#4	
175.49	Access to a Public Way	1027.6.1	
175.50	Maximum Height From Floor (emergency escape and rescue)	1029.3	
175.51	Minimum Thickness of Weather Coverings (vinyl siding)	Table 1405.2	
175.52	Vinyl Siding (weather-resistive barrier required)	1405.14.2	
175.53	Ground Snow Loads	1608.2	
175.54	Flood Loads	1612	
175.55	Frost Protection	1809.5	
175.56	Scope - mechanical	2801.1	
175.57	Scope - plumbing	2901.1	
175.58	Swimming Pools, Spas and Hot Tubs		Appendix G
175.59	Swimming Pool – defined	3109.2	AG102
175.60	Compliance With Other Codes	3401.3	

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 2009 Edition*; and the *International Residential Building Code 2009 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-certified copy of this chapter is on file in the office of the city clerk.

175.03 AMENDMENTS, MODIFICATIONS, ADDITIONS AND DELETIONS. *The International Building Code, 2009 Edition* (hereinafter known as the IBC), and the *International Residential Code, 2009 Edition* (hereinafter known as the IRC), are amended as hereinafter set out in Sections 175.01 through 175.60.

175.04 REFERENCED CODES - - DELETIONS. The following are deleted from the IRC and are of no force or effect in this chapter:

IRC –Part IV Energy Conservation, Part V Mechanical, Part VI Fuel Gas, Part VII Plumbing, Part VIII Electrical

175.05 REFERENCED CODES - - AMENDMENTS, MODIFICATIONS, ADDITIONS AND DELETIONS. The remaining sections in this chapter represent amendments to the requirements contained in the IBC and IRC. In the event there are requirements that conflict with these codes the requirements of this chapter shall prevail except that all references to flood hazard construction shall be coordinated in concurrence with Ankeny NFIP adoption dated 16-May-1983.

175.06 SUBSECTIONS 101.1 AND R101.1 AMENDED - - TITLE. Subsections 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 subsections:

Subsection 101.1 Title. These regulations shall be known as the Ankeny Building Code, hereinafter known as "this code."

Subsection 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 SUBSECTION 101.4.1 AND AMENDED - - GAS. Subsection 101.4.1. Gas, of the IBC is hereby amended by deleting said subsections and inserting in lieu thereof the following:

Subsection 101.4.1 Gas Fuel gas piping shall comply with the requirements of Chapter 12 of the Ankeny Plumbing Code, unless the provisions conflict with 661- Chapter 226, Liquefied Petroleum Gas, Iowa Administrative Code. Where Chapter 12 conflict with 661- Chapter 226, the provisions of 661 – Chapter 226 shall be followed

175.08 SUBSECTIONS 103.1 AND R103.1 AMENDED - - CREATION OF ENFORCEMENT AGENCY Subsection 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:

Subsections 103.1 and R103.1 Building and Zoning Administrator The term Building Official is intended to also mean the Building and Zoning Administrator 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.

175.09 SUBSECTIONS 103.3 AND R103.3 ADDITION - - DEPUTIES Subsections 103.3, Deputies, of the IBC and R103.3, Deputies, of the IRC, are hereby amended by adding the following paragraph to said subsections:

Subsections 103.3 and R103.3 – Building & Zoning Administrator There is also hereby established the position of Building & Zoning Administrator, who shall be designated by the

Planning & Building Director and when so appointed, shall be responsible for the enforcement of the Building Code; the Mechanical code; the Housing code; the Plumbing code; the Electrical code, the Zoning code and the Fire Prevention code of the city. The Building & Zoning Administrator shall have authority to file a complaint in any court of competent jurisdiction charging a person with the violation of this title. The Building and Zoning Administrator shall have whatever additional duties the Planning & Building Director may prescribe.

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

Subsections 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 SUBSECTIONS 105.2 AND R105.2 AMENDED - - WORK EXEMPT FROM PERMIT. Subsections 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 subsections as follows:

Subsections 105.2 and R105.2 Work Exempt From Permit

Subsection 105.2 Building - Item #1	Detached structures not exceeding 120 sq. ft.	Delete
Subsection 105.2 Building - Item #2	Fences not over 6 feet high	Delete
Subsection 105.2 Building - Item #6	Sidewalks and driveways	Delete
Subsection 105.2 Building - Item #9	Prefabricated swimming pools	Delete
Subsection 105.2 Building - Item #10	Shade cloth structures	Delete
Subsection R105.2 Building - Item #1	Detached structures not exceeding 200 sq. ft.	Delete
Subsection R105.2 Building - Item # 2	Fences not over 6 feet high	Delete
Subsection R105.2 Building - Item #5	Sidewalks and driveways	Delete
Subsection R105.2 Building - Item #7	Prefabricated swimming pools	Delete
Subsection 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 SUBSECTIONS 105.5 AND R105.5 AMENDED - - EXPIRATION. Subsections 105.5. Expiration, of the IBC and R105.5, Expiration, of the IRC are hereby amended by deleting said subsections and inserting in lieu thereof the following:

> Subsections 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 SUBSECTIONS 109.2.1 AND R108.2.1 ADDITION - - PLAN REVIEW FEES. Subsections 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 subsections:

> Subsections 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.

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

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

> Subsections 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.

175.16 SECTION R202 AMENDED - - DEFINITIONS. Section 202, Definitions, of the IRC, is hereby amended by deleting the definition of accessory structure and inserting in lieu thereof the following:

> 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.

175.17 TABLE R301.2(1) 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 as follows:

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

Ground Snow Load	Wind Speed MPH	Seismic Design Category	Subject To Damage From			Winter		Flood Hazards		
			Weathering	Frost Line Depth	Termite	Design Temp	Ice Barrier Req'd.	NFIP Adoption	Air Freezing Index	Mean Annual Temp.
30 PSF	90	A	Severe	42"	No	-5° F	Yes	16-May-83	1833	48.6

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

Subsection R302.1 Exterior walls exception #1 Accessory structures less than 10 feet 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 10' from dwelling unit wall(s) shall be fire rated in accordance with this code.

175.19 SUBSECTION TABLE R302.1 AMENDED - - EXTERIOR WALLS. Table R302.1, Exterior Walls is hereby amended by modifying said table as follows:

Table R302.1, Exterior Walls

Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Fire Separation Distance
Walls	(Fire-resistance rated)	1 hour with exposure from both sides	0 feet
	(Not fire-resistance rated)	0 hours	3 feet
Projections	(Fire-resistance rated)	1 hour on the underside	2 feet
	(Not fire-resistance rated)	0 hours	3 feet
Openings	Not allowed	N/A	< 3 feet
	25% Maximum Wall Area	0 hours	3 feet
	Unlimited	0 hours	5 feet
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	3 feet

175.20 SUBSECTION R302.2 AMENDED - - TOWNHOUSES. Subsection R302.2, Townhouses, of the IRC, is hereby amended by deleting said subsection and inserting in lieu thereof the following (exception remains unchanged):

Subsection R302.2 Townhouses Each sprinklered townhouse shall be considered a separate building and shall be separated by fire-resistance-rated wall assemblies meeting the requirements of section R302.1 for exterior walls.

175.21 SUBSECTION R302.2A ADDITION - - TOWNHOUSES. Subsection R302.2A, Townhouses, of the IRC, is hereby established by adding the following subsection and exception:

Subsection R302.2A Townhouses Each non-sprinklered townhouse shall be considered a separate building and shall be separated by fire--resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with the Ankeny Electrical Code. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

175.22 R302.3 AMENDED - - TWO-FAMILY DWELLINGS. Subsection R302.3 Two-family dwellings, of the IRC, is hereby amended by deleting said subsection and inserting in lieu thereof the following and deleting exception 2:

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 R302.2A

Exception 2 deleted

175.23 SUBSECTION R302.5.1 ADDITION - - OPENING PROTECTION. Subsection R302.5.1, Opening Protection, of the IRC is hereby amended by and adding a sentence to said subsection as follows:

Subsection R302.5.1 Opening protection All doors shall be self-closing and self-latching.

175.24 SUBSECTION R302.6 AMENDED - - DWELLING/GARAGE FIRE SEPARATION. Subsection R302.6, Dwelling/garage fire separation, of the IRC is hereby amended by deleting said subsection and inserting in lieu thereof the following subsection:

Subsection 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.

175.25 SUBSECTION TABLE R302.6 AMENDED - - DWELLING/GARAGE SEPARATION. Table R302.6, Exterior Walls 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

175.26 SUBSECTION R303.3 AMENDED - - BATHROOMS. Subsection 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:

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

175.27 SUBSECTIONS 406.1.4 AMENDED - - SEPARATION. Subsections 406.1.4, Separation, of the IBC, Separation, is hereby amended by deleting subsection #1 and inserting in lieu thereof the following:

Subsections 406.1.4 Separation #1 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 715.4.3. 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.

175.28 SUBSECTION R310.1 AMENDED - - EMERGENCY ESCAPE AND RESCUE REQUIRED. Subsection R310.1, Emergency escape and rescue required, of the IRC is hereby amended by deleting the first paragraph of said section and inserting in lieu thereof the following:

Subsection R310.1 Emergency escape and rescue required Basements, habitable attics and every sleeping room shall have at least one openable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Where a window is provided as a means of escape and rescue opening from a basement, it shall have a sill height of not more than 44 inches above the floor or landing. Where a landing is provided, the landing shall be not less than 36 inches wide, not less than 18 inches out from the exterior wall, and not more than 24 inches in height. The landing shall be permanently affixed to the floor below and the wall under the openable area of the window it serves. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section 310.3. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2.

175.29 SUBSECTIONS 1029.4 AND R310.1.4 AMENDED - - OPERATIONAL CONSTRAINTS. Subsections 1029.4, Operational Constraints, of the IBC and R310.1.4, Operational constraints, of the IRC are hereby amended by adding a new sentence following these subsections:

Subsections 1029.4 and R310.1.4 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.

175.30 SUBSECTIONS 1029.5 AND R310.2 ADDITION - - WINDOW WELLS. Subsections 1029.5, Window Wells, of the IBC and R310.2, Window wells, of the IRC are hereby amended by adding the following subsection:

Subsections 1029.5.3 and R310.2.2 Window well drainage All window wells shall be provided with approved drainage.

175.31 SUBSECTION R310.5 AMENDED - - EMERGENCY ESCAPE WINDOWS UNDER DECKS AND PORCHES. Subsection R310.5, Emergency escape windows under decks and porches, of the IRC is hereby amended by adding a new sentence following this section:

Subsection R310.5 Emergency escape windows under decks and porches Cantilever areas of all construction elements shall be regulated in accordance with this section.

175.32 SUBSECTION R311.7.4.1 AMENDED - - RISER HEIGHT. Subsection R311.7.4.1, Riser height, of the IRC is hereby amended by deleting said section and inserting in lieu thereof the following:

Subsection R311.7.4.1 Riser height 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.

175.33 SUBSECTION R311.7.4.3 ADDITION - - PROFILE. Subsection R311.7.4.3, Profile, of the IRC, is hereby amended by adding the following exception:

Subsection R311.7.4.1 Profile exception 3 The opening between adjacent treads is not limited on exterior stairs serving individual dwelling units.

175.34 SUBSECTION R311.7.7.2 ADDITION - - CONTINUITY. Subsection R311.7.7.2, Continuity, of the IRC, is hereby amended by adding the following exception:

Subsection R311.7. 7.2 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.

175.35 SUBSECTION R313.1 AMENDED - - TOWNHOUSE AUTOMATIC FIRE SPRINKLER SYSTEMS. Subsection R313.1 Townhouse automatic fire sprinkler system, of the IRC, is hereby amended by deleting said subsection and inserting the following in lieu thereof (exception remains unchanged):

Subsection R313.1 Townhouse automatic fire sprinkler systems An automatic residential fire sprinkler system shall be installed in townhouses containing more than 12 (twelve) dwelling units.

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

Subsection 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.

175.37 SUBSECTION R403.1.4.1 - - AMENDED - - FROST PROTECTION. Subsection R403.1.4.1, of the IRC, is hereby amended by deleting all existing exceptions and inserting in lieu thereof the following:

> Subsection 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 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. Garages areas shall have all sod and/or debris removed prior to installation of said floor.

175.38 SUBSECTION R404.1 AMENDED - - CONCRETE AND MASONRY FOUNDATION WALLS. Subsection R404.1, Concrete and masonry foundation walls, of the IRC, is hereby amended by adding the following item number 1 - bottom lateral support:

> Subsection R404.1 Concrete and masonry foundation walls item number 1 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

175.39 SUBSECTIONS 1807.1.5.1 AND R404.1.2.2.3 ADDITION - - FOUNDATION WALLS FOR CONVENTIONAL LIGHT FRAME WOOD CONSTRUCTION. Subsections 1807.1.5.1, Foundation Walls For Conventional Light Frame Wood Construction, of the IBC and R404.1.2.2.3, Foundation Walls For Conventional Light Frame Wood Construction, of the IRC, are hereby established by adding the following subsections and table:

> Subsections 1807.1.5.1 and R404.1.2.2.3 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
		Unit				
Gross	Net	Concrete	Masonry	Concrete	Masonry	Masonry
8	7' 8"	7 ½"	8"	½"horizontal bars, placement in the middle, and near the top & bottom – ½" 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	½" bars 2' o.c. horizontally & 20" vertically o.c. (5/8" bars 2' o.c. horizontally & 30" vertically o.c.)	See Chapter 18 IBC	Same as above
10	9' 8"	8"	See Chapter 18 IBC		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 – ½" 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 may be installed in accordance with the respective codes as applicable.						

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

Subsection 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.

175.41 SUBSECTION R506.2.4 ADDITION - - REINFORCEMENT SUPPORT. Subsection R506.2.4, of the IRC, Reinforcement support is hereby amended by addition of the following exception:

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

175.42 SUBSECTION 907.2.11 AMENDED - - SINGLE AND MULTIPLE-STATION SMOKE ALARMS. Subsection 907.2.11, of the IBC, Single and Multiple-station smoke alarms is hereby amended by deleting said subsection and inserting in lieu thereof the following:

Subsection 907.2.11 Single and Multiple-station smoke alarms Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with provisions of this code and the household fire warning equipment provision of NFPA 72. Smoke alarms shall be addressable with sounder bases and tied into the building fire alarm system as a supervisory signal only. Mini horns are not required if notification from a building fire alarm system is through the smoke alarms with sounder bases.

175.43 SUBSECTION R907.3 AMENDED - - RE-COVERING VERSUS REPLACEMENT. Subsection R907.3 Re-covering versus replacement, of the IRC, is hereby amended by deleting item number 4

175.44 SUBSECTION M1403.2 AMENDED - - FOUNDATIONS AND SUPPORTS. Subsection M1403.2 Foundations and supports, of the IRC, is hereby amended by deleting said section and inserting in lieu thereof the following:

Subsection M1403.2 Foundation and supports Foundations and supports for outdoor mechanical systems shall be raised at least one and one half inches above the finished grade and shall also conform to the manufacturer's installation instructions.

175.45 SUBSECTION 1007.2 ADDITION - - CONTINUITY AND COMPONENTS. Subsection 1007.2, Continuity and Components, Of the IBC, is hereby amended by adding the following #9 to said subsection:

Subsection 1007.2 Continuity and Components #9 Components of exterior walking surfaces shall be hard surfaced.

175.46 SECTION 1008 ADDITION - - DOORS, GATES AND TURNSTILES. Section 1008, Doors, Gates and Turnstiles, of the IBC, is hereby amended by adding the following subsection:

Subsection 1008.1.6.1 Frost Protection Exterior landings at doors shall be provided with frost protection.

175.47 SUBSECTION 1009.12 ADDITION - - HANDRAILS. Subsection 1009.12, Handrails, of the IBC is hereby amended by adding the following exception:

Subsection 1009.12 Handrails exception 6 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.

175.48 SUBSECTION 1012.4 ADDITION - - (HANDRAIL) CONTINUITY. Subsection 1012.4, Continuity, of the IBC is hereby amended by adding the following exception:

Subsection 1012.4 Continuity exception 5 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.

175.49 SUBSECTION 1027.6 ADDITION - - ACCESS TO A PUBLIC WAY. Subsection 1027.6, Access to a Public Way, Of the IBC, is hereby amended by adding the following subsection:

Subsection 1027.6.1 Access to a Public Way Components of exterior walking surfaces shall be hard surfaced.

175.50 SUBSECTION 1029.3 AMENDED - - (EMERGENCY ESCAPE AND RESCUE) MAXIMUM HEIGHT FROM FLOOR. Subsection 1029.3, Maximum Height From Floor, of the IBC is hereby amended by adding the following exception:

Subsection 1029.3 Maximum Height From Floor exception 1 Within individual units of Group R-2 and R-3 occupancies where a window is provided as a means of escape and rescue opening from a basement it shall have a sill height of not more than 44 inches above the floor or landing. Where a landing is provided the landing shall be not less than 36 inches wide, not less than 18 inches out from the exterior wall, and not more than 24 inches in height. The landing shall be permanently affixed to the floor below and the wall under the openable area of the window it serves.

175.51 TABLE 1405.2 ADDITION - - MINIMUM THICKNESS OF WEATHER COVERINGS. Table 1405.2, Minimum Thickness of Weather Coverings, of the IBC is hereby amended by adding the following footnote:

Table 1405.2 Minimum Thickness of Weather Coverings footnote e Vinyl siding shall be provided with a weather-resistant sheathing paper.

175.52 SUBSECTION 1405.14 ADDITION - - VINYL SIDING. Subsection 1405.14, Vinyl Siding, of the IBC is hereby amended by adding a new section as follows:

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

175.53 SUBSECTION 1608.2 AMENDED - - GROUND SNOW LOADS. Subsection 1608.2, Ground Snow Loads, of the IBC is hereby amended by deleting said section and inserting in lieu thereof the following:

Subsection 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 in the building code, except that the minimum allowable flat roof snow load may be reduced to not less than 80 percent of the ground snow load.

175.54 SECTION 1612 AMENDED - - FLOOD LOADS. Section 1612, Flood Loads of the IBC is hereby amended by deleting said section and inserting in lieu thereof the following section:

Section 1612.1 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 subsection 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 1612.2 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.

175.55 SUBSECTION 1809.5 ADDITION - - FROST PROTECTION. Subsection 1809.5 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. Garages areas shall have all sod and/or debris removed prior to installation of said floor.

175.56 SUBSECTION 2801.1 AMENDED - - SCOPE – MECHANICAL. Subsection 2801, Scope (mechanical), of the IBC is hereby amended as follows:

Subsection 2801.1 Scope (mechanical) Strike the words 'and the International Fuel Gas Code'.

175.57 SUBSECTION 2901.1 AMENDED - - SCOPE – PLUMBING. Subsection 2901.1, Scope (plumbing), of the IBC is hereby amended as follows:

Subsection 2901.1 Scope (plumbing) Strike the word International and insert in lieu thereof 'Ankeny' and delete the last sentence of said subsection.

175.58 APPENDIX G ADOPTED - - SWIMMING POOLS, SPAS AND HOT TUBS. Appendix G, Swimming Pools, Spas and Hot Tubs, of the IRC is hereby adopted by reference and shall be in full force and effect in this chapter.

175.59 SUBSECTION 3109.2 AND AG102 DEFINITION AMENDED - - SWIMMING POOL. Subsection 3109.2, Definition, of the IBC and AG102, Definitions, of the IRC is hereby amended by deleting said definition and inserting in lieu thereof the following:

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.

175.60 SECTION 3401.3 AMENDED - - COMPLIANCE. Section 3401.3, Compliance, of the IBC is hereby amended by deleting said section and inserting in lieu thereof the following:

Section 3401.3 Compliance Alterations, repairs, additions and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy in the Ankeny Fire Code, Ankeny Plumbing and Fuel Gas Code, Ankeny Property Maintenance and Housing Code, Ankeny Mechanical Code, Ankeny Electrical Code and the Ankeny Residential Code. The provisions of this code shall not be deemed to nullify or lessen any provisions of local, state or federal law.

2. Copy. An official copy of the Ankeny Building Code hereby adopted, including a certificate by the City Clerk as to its adoption and the effective date thereof, is on file in the office of the City Clerk in City Hall, and shall be kept there on file and copies shall be available for public inspection.

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

4. Effective date. This ordinance shall be effective August 15, 2010, after its final passage and publication as required by law.

PASSED AND APPROVED this **2nd** day of **AUGUST**, 2010.

Steven D. Van Oort, Mayor

ATTEST:

Pamela DeMouth, City Clerk

PUBLISHED IN THE
DES MOINES REGISTER
ON THE 6th DAY OF AUGUST, 2010

1st Con 7/6/10
2nd Con 7/19/10
3rd Con 8/2/10