

ORDINANCE NO. 019-19

2018 BUILDING CODE  
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AN ORDINANCE AMENDING CHAPTER 33 OF THE MUNICIPAL CODE OF THE CITY OF CEDAR RAPIDS, IOWA, BY REPEALING CHAPTER 33 THEREOF ENTITLED "BUILDING CODE", CONSISTING OF THE INTERNATIONAL BUILDING CODE, 2015 EDITION AS AMENDED; AND ENACTING AND ADOPTING A NEW CHAPTER 33 IN LIEU THEREOF ENTITLED "BUILDING CODE", BEING THIS ORDINANCE HEREAFTER SET OUT, WHICH ADOPTS BY REFERENCE, WITH CERTAIN AMENDMENTS, THE INTERNATIONAL BUILDING CODE, 2018 EDITION, AND THE INTERNATIONAL RESIDENTIAL BUILDING CODE, 2018 EDITION, AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL, INC., REGULATING THE ERECTION, CONSTRUCTION, ENLARGEMENT, ALTERATION, REPAIR, MOVING, REMOVAL, CONVERSION, DEMOLITION, OCCUPANCY, EQUIPMENT, USE, AREA, HEIGHT, AND MAINTENANCE OF BUILDINGS OR STRUCTURES IN THE CITY OF CEDAR RAPIDS, IOWA; PROVIDING FOR THE ISSUANCE OF PERMITS AND COLLECTION OF FEES THEREFOR; PROVIDING PENALTIES FOR THE VIOLATION THEREOF; AND REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT THEREWITH.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CEDAR RAPIDS, IOWA, that Chapter 33 of the Municipal Code of the City of Cedar Rapids, is amended as follows:

## BUILDING CODE

SECTION 1. Previous Chapter repealed and replaced.

### 33.01 INTERNATIONAL BUILDING CODE 2018 ADOPTED.

Except as hereinafter added to, deleted, modified, or amended, there is hereby adopted as the Building Code of the City of Cedar Rapids, Iowa, those certain codes known as the International Building Code, 2018 Edition, and the International Residential Building Code, 2018 Edition, as published by the International Code Council, Inc. including Appendix F: Passive Radon Gas Controls Methods. The provisions of said Building Code shall be controlling in the construction of buildings and other structures and in all matters covered by said Building Code within the corporate limits of the City of Cedar Rapids, Iowa, and shall be known as the Building Code.

### 33.02 SCOPE.

Chapter 11 International Residential Code 2018 Edition (Energy) and

Section [A] 101.4.6 Referenced codes. Add Exception: Buildings complying with the Iowa Energy Code as adopted by Iowa Administrative Code 661-303 (103A) Scope and applicability of energy conservation requirements.

### 33.03 REFERENCED CODES.

Section [A] 101.4.3 Referenced codes. Delete Section [A] 101.4.3 (Plumbing)

### 33.04 103.1 AND R103.1 CREATION OF ENFORCEMENT AGENCY.

Section 103.1 and R103.1 Creation of enforcement agency is hereby amended by modifying Section 103.1 and R103.1 Creation of enforcement agency, as follows:

Section 103.1 and R103.1 Creation of enforcement agency. Building inspections is hereby created and the official in charge of administering and enforcement of this code shall be known as the "building official", as defined in Chapter 2 of this code.

33.05 104.12 CONFLICT OF INTEREST.

Section 104.12 Conflict of interest is hereby added as follows:

Section 104.12 Conflict of interest. The building official, inspectors and other employees who are engaged in building inspections, building plan review and issuance activities in accordance with this code shall not directly or indirectly perform and/or be involved in any work, sales of services, equipment, materials or systems regulated by this code for any financial gains/benefits nor enter into any written or verbal contractual agreements for financial gains/benefits. Employees may perform work or activities regulated by this code when it is without compensation or other financial benefits. In no event, shall the employee inspect or be involved in the inspection process on any project where the employee performed work or has a financial interest.

33.06 IBC SECTION 105.1 REQUIRED PERMITS.

IBC Section 105.1 Required Permits is hereby modified by adding the following paragraph as follows:

Any person or person(s) doing work regulated by this code, or causing such work shall first make application to the Building official or designee and obtain the required permit prior to such work. An investigation fee may be charged when a permit has not first been obtained. Any person who commences any work before obtaining the necessary *permits* shall be subject to a fee established by The City Council of the City of Cedar Rapids, Iowa by resolution that shall be in addition to the required *permit* fees and investigation fees.

33.07 IBC SECTION 105.2 WORK EXEMPT FROM PERMIT.

Section 105.2 Work exempt from permit is hereby amended by modifying Section 105.2 Work exempt from permit, as follows:

Section 105.2 Work exempt from permit.

Permits shall not be required for the following:

Building:

1. Detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.58m<sup>2</sup>). The structure must comply with all applicable Zoning restrictions.

2. Delete this item.

Item 3 will remain as written.

Item 4 will remain as written.

Item 5 will remain as written.

Item 6 will remain as written.

7. Painting, papering, tiling, carpeting, or similar finish work, cabinets and/or countertops replaced in the same location only.

Items 8 through 13 remain as written

Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

### 33.08 IRC SECTION R105.2 WORK EXEMPT FROM PERMIT.

IRC Section R105.2 Work exempt from permit is hereby amended by modifying Section R105.2 Work exempt from permit, as follows:

Section R105.2 Work exempt from permit.

Permits shall not be required for the following:

1. Detached accessory structures one or more story's used as tool and storage sheds, playhouses and similar uses, provided the total floor area does not exceed 200 square feet (18.58m<sup>2</sup>). The structure must comply with all applicable Zoning restrictions.
2. Delete this item.

Items 3 through 5 remain as written.

6. Painting, papering, tiling, carpeting, or similar finish work, cabinets and/or countertops replaced in the same location only.
7. Prefabricated and/or inflatable swimming pools that are not permanently installed.

Items 8 and 9 remain as written.

10. Delete this item

Add this item:

11. Gutters, storm windows, storm doors and screens.

Exemption from permit requirements for this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

### 33.09 105.5 and R105.5 EXPIRATION.

Section 105.5 and R105.5 Expiration are hereby amended by adding Section 105.5.1 and Section R105.5.1 Twelve months to Section 105.5 and R105.5 Expiration, as follows:

1. Section 105.5.1 and R105.5.1 Twelve months. Every building 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 building official. The building official or designee may deem it a violation of this code if the work prescribed in an obtained building permit is not completed within the term of the permit.

If the work has not been completed by the expiration date of the permit, the building official or designee may renew the permit if the applicant can provide evidence of substantial progress and provide a schedule of additional regular inspections. No further work shall be done until the permit has 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.

33.10 105.6 AND R105.6 SUSPENSION OR REVOCATION.

Section 105.6 and R105.6 Suspension or revocation are amended by adding the following paragraph as follows:

Section 105.6 and R105.6 Suspension or revocation. Before any permit is suspended or revoked, the building official or designee will provide notice to the person to whom the permit was issued and the owner of the property setting forth the facts and circumstances constituting the basis of such action, and providing an opportunity to be heard.

33.11 109.1 AND R108.1 PAYMENT OF FEES.

Section 109.1 and R108.1 Payment of fees are hereby amended by modifying Section 109.1 and R108.1 Payment of fees, as follows:

Section 109.1 and R108.1 Payment of fees. A permit shall not be issued until the fees prescribed by law have been paid or approval of payment arrangements has been granted. Nor shall any amendment to a permit be released until the additional fee, if any, has been paid.

33.12 109.2 AND R108.2 SCHEDULE OF PERMIT FEES.

Sections 109.2 and R108.2 Schedule of permit fees are hereby amended by repealing Sections 109.2 and R108.2 Schedule of fees and replacing said Sections with new Sections 109.2 and R108.2 as follows:

Sections 109.2 and R108.2 Schedule of permit fees. Building permits shall be computed from the fee schedule set by resolution of the City Council.

The City Council of the City of Cedar Rapids, Iowa may by resolution set fees for re-inspection, special inspection, and moving building inspections. These inspection fees shall be identified in the Schedule of fees.

33.13 109.2.1 AND R108.2.1 PLAN REVIEW FEES.

Sections 109.2.1 and R108.2.1 Plan review fees are hereby added as follows:

Section 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.

33.14 109.3 AND R108.3 BUILDING PERMIT VALUATIONS.

Sections 109.3 and R108.3 Building permit valuations are hereby amended by deleting Sections 109.3 and R108.3 Building permit valuations and by replacing said Sections with the following:

Sections 109.3 and R108.3 Building permit valuations. The determination of value or valuation under any of the provisions of the Cedar Rapids Building Code shall be made by the building official. The valuation to be used in computing the building permit fees and the plan review fees shall be the total value of all construction work for which the permit is issued as well as all finish work, roofing, permanent accessories, and the usual cost of

labor, whether such labor is performed by the owner or by others. Such valuation excludes the cost of the lot or improvements to the lot, such as grading, landscaping, walks, or drives.

Exception: Exclude the cost of air conditioning, electrical, heating, plumbing or ventilation systems in occupancies in Group R-2 or R-3.

The valuation for additional new work, or for alteration, remodeling, repairs or replacement shall include cost of materials and labor for the construction of the new work, repairs, replacements, additions, or remodeling.

The building inspector or plans examiner shall correct the determination of value of any work for which a permit is issued if such valuation appears to be in error or misstated. The building inspector or plans examiner may request invoices of the materials and labor to support the valuation or may refer to the current published International Code Council valuation chart at their discretion.

### 33.15 109.5.1 AND R108.4.1 RE-INSPECTION FEES.

Sections 109.5.1 and 108.4.1 Re-inspection fees are hereby added as follows:

Section 109.5.1 and R108.4.1 Re-inspection fees. A re-inspection fee may be assessed for each inspection or re-inspection when such work or portion of such work for which the inspection is called for is not complete or when corrections called for are not made.

Re-inspection fees may be assessed when the inspection card is not posted or otherwise available on the work site, the approved plans are not readily available to the inspector, access is not provided on the date for which the inspection is requested, the property and building address are not properly posted, or when there is a deviation from plans requiring approval of the building official.

This section is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or re-inspection.

### 33.16 111.2 and R110.3 CERTIFICATE OF OCCUPANCY. The City of Cedar Rapids Building Code is hereby amended by deleting Section 111.2 Number (3) of the International Building Code, 2018 Edition and Section R110.3 Number (3) of the International Residential Code, 2018 Edition and leaving said section numbers (3) blank.

### 33.17 113.1 AND R112.1 GENERAL.

Sections 113.1 and R112.1 General are hereby amended by deleting Sections 113.1 and R112.1 General and replacing said Sections with the following:

Section 113.1 and R112.1 General. In order to hear and decide appeals concerning the suitability of alternate materials and methods of construction and to hear and decide appeals of determinations made by the building official or designee or Fire Marshal or designated representative concerning interpretations of the provisions of this code or the International Fire Code, there shall be and is hereby created a Board of Appeals, consisting of seven members whose place of business, residence, or work is located in the City of Cedar Rapids, Iowa, and who are qualified by experience and training to pass upon matters pertaining to building construction. The building official or designee shall be an ex-officio member and shall act as Secretary of the Board for appeals involving this code. The Fire Marshal or designee shall also be an ex-officio member and shall act as Secretary of the Board for appeals involving the International Fire Code.

Appointment of Members and Terms of Office. The Mayor shall appoint the members of the Board with the approval of the City Council. The terms of the members shall be for 3 years; the terms shall expire on June 30<sup>th</sup> of each year. A vacancy within any term shall be filled by appointment by the Mayor with the approval of the City Council for the unexpired portion of that term only.

The Board shall adopt reasonable rules and regulations for conducting its investigations and shall render all decisions and findings in writing to the building official, with a duplicate copy to the appellant. The Board shall have no authority to waive requirements of this code or the International Fire Code.

33.18 R114.1 Notice to owner or owner's authorized agent.

Section R114.1 Notice to owner or owner's authorized agent is hereby amended by adding the following paragraph to Section R114.1 Notice to owner, as follows:

R114.1 Notice to owner or owner's authorized agent. Before any permit is suspended or revoked, the building official or designee will provide notice to the person to whom the permit was issued setting forth the facts and circumstances constituting the basis of such action.

33.19 115.1 AUTHORITY.

Section 115.1 Authority is hereby amended by adding the following paragraph to Section 115.1 Authority, as follows:

115.1 Authority. Before any permit is suspended or revoked, the building official or designee will provide notice to the person to whom the permit was issued setting forth the facts and circumstances constituting the basis of such action.

33.20 116.6 OTHER CONDITIONS.

Section 116.6 Other conditions is hereby added as follows:

Section 116.6 Other conditions. Section 116 shall also apply to structures regulated by the IRC. In addition to the authority granted by the provisions of Section 116, the building official or designee is hereby authorized to exercise emergency measures to protect the health, safety and public welfare of the community by certain procedures as follows:

1. Inspect the building and surrounding premises to determine the extent of dilapidation, damage, obsolescence, fire hazard and risk as an attractive nuisance as determined by the building official.
2. Inform the owner or owner's agent of the unsafe, dangerous or hazardous conditions that cause such building to be unsafe or an attractive nuisance.
3. Inform the owner or owner's agent of the applicable provisions of Section 116 of the International Building Code, 2018 Edition, and secure a commitment from the owner, or owner's agent, regarding a time schedule and manner of compliance with said Section.
4. Order the prompt boarding-up of the windows, doors, and other openings of unsafe or vacant buildings to prevent unauthorized access or the perpetuation of an attractive nuisance during the time that is necessary to gain compliance with the Cedar Rapids Building Code.



5. Upon the failure of the owner or owner's agent to comply with the order to close, board up and secure an unsafe building within seven (7) days' time after receiving such order, the Building Official, after notice and opportunity for hearing, may cause the openings boarded up and secured, or the premises barricaded and fenced, and the unsafe conditions abated, with the cost of such construction, barricading, fencing and abatement to be assessed against the property.

### 33.21 202 Definitions

Section 202 Definitions is hereby amended as follows:

The City of Cedar Rapids Building Code is hereby amended by deleting the definition of Townhouse in Section 202 of the International Building Code, 2018 Edition, and International Residential Code, 2018 Edition and inserting in lieu thereof the following:

**TOWNHOUSE.** A single-family dwelling unit constructed in a group of two or more attached units in which each unit extends from foundation to roof and with a yard or public way on at least two sides.

The City of Cedar Rapids Building Code is hereby amended by adding the definition of Pier foundation in Section 202 of the International Building Code, 2018 Edition, and International Residential Code, 2018 Edition and inserting in lieu thereof the following:

**PIER FOUNDATION.** A grid system of girders (beams), piers, or columns and footings used in construction to elevate the superstructure above the ground plane or grade. The piers serve as columns for the superstructure.

### 33.22 R302.1 Exterior Walls

**EXTERIOR WALLS.** The City of Cedar Rapids Building Code is hereby amended by deleting Exception 2 of Section R302.1 of the International Residential Code, 2018 Edition, and by replacing said Exception with a new Exception 2 as follows:

Exception 2. Fire separation distance based on an imaginary line between two buildings on the same lot shall not be less than 3'.

### 33.23 R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA.

Table R301.2(1) Climatic and Geographic Design Criteria is hereby amended by modifying Table R301.2(1) as follows:

GROUND SNOW LOAD	WIND SPEED MPH	Topo. Special wind Debris	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP	ICE SHIELD UNDERLAYME NT REQUIRED	FLOOD HAZARDS		AIR FREEZING INDEX	MEAN ANNUAL TEMP
				Weatheri ng	Frost Line Depth	Termite	Decay			NFIP	FIRM		
										Adopti on	Maps		
30 PSF	115	NO	A	Severe	42"	Moderate Heavy	Slight- Modera te	-5 F	YES	1982	4/5/10	1784	48.9

### 33.24 R302.1(1) EXTERIOR WALL PROJECTIONS

EXTERIOR WALL PROJECTIONS. The City of Cedar Rapids Building Code is hereby amended by deleting footnote b. of Table R302.1(1) and footnote c. of Table R302.1(2) of the International Residential Code, 2018 Edition, and leaving said footnotes blank.

### 33.25 R302.5.1 OPENING PROTECTION.

OPENING PROTECTION. The City of Cedar Rapids Building Code is hereby amended by deleting Section R302.5.1 of the International Residential Code, 2018 Edition and by replacing said section with a new Section R302.5.1 as follows:

R302.5.1 Opening protection. Openings from a private garage into a room used for sleeping purposes shall not be permitted. Other openings between a garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honey-comb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

### 33.26 R302.13 FIRE PROTECTION OF FLOORS

FIRE PROTECTION OF FLOORS. The City of Cedar Rapids Building Code is hereby amended by deleting Section R302.13 of the International Residential Code, 2018 Edition, and leaving said section blank.

### 33.27 R308.4.2 GLAZING ADJACENT TO DOORS

GLAZING ADJACENT TO DOORS. The City of Cedar Rapids Building Code is hereby amended by deleting Section R308.4.2 of the International Residential Code, 2018 Edition, and by replacing said section with a new Section R308.4.2 as follows:

R308.4.2 Glazing adjacent to doors. Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge of the glazing is within a 24 inch arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches above the floor or walking surface shall be considered to be a hazardous location.

Exceptions:

1. Decorative glazing.
2. Where there is an intervening wall or other permanent barrier between the door and the glazing.
3. Where access through the door is to a closet or storage area 3 feet or less in depth. Glazing in this application shall comply with Section R308.4.3.
4. Glazing that is adjacent to the fixed panel of patio doors.

### 33.28 R308.4.5 GLAZING and wet surfaces

GLAZING and wet surfaces. The City of Cedar Rapids Building Code is hereby amended by deleting Section R308.4.5 of the International Residential Code, 2018 Edition, and by replacing said section with a new Section R308.4.2 as follows:

R308.4.5 Glazing and wet surfaces. Glazing in walls, enclosures or fences containing or adjacent to hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers and

indoor or outdoor swimming pools where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface shall be considered to be a hazardous location. This shall apply to single glazing and each pane in multiple glazing.

Exception: Glazing that is more than 60 inches (1524 mm), measured horizontally, from the water's edge of a bathtub, hot tub, spa, whirlpool or swimming pool or from the edge of a shower, sauna or steam room.

### 33.29 R311.7.8.4 \ 1011.11 CONTINUITY

Section R311.7.8.4 Continuity is hereby amended by adding Exception 3 to Section R311.7.8.4 Continuity, as follows:

Exception 3. Offsets or interruptions of six inches or less in total length shall be considered, for the purpose of this code, to be continuous.

### 1011.11 HANDRAILS EXCEPTION 5.

Section 1011.11 Handrails is hereby amended by adding Exception 5 as follows:

Exception 5. Handrails within a dwelling unit or serving an individual dwelling unit may have offsets or interruptions of six inches or less in total length and shall be considered, for the purpose of this code, to be continuous.

### 33.30 R312.2 WINDOW FALL PROTECTION AND R312.2.1 WINDOW SILLS.

REPEAL OF SECTION (WINDOW SILLS). The City of Cedar Rapids Building Code is hereby amended by deleting Section 1015.8 of the International Building Code, 2018 Edition, and Section R312.2.1 of the International Residential Code, 2018 Edition, and leaving said sections blank.

### 33.31 R313 AUTOMATIC FIRE SPRINKLER SYSTEMS.

#### R313.1 TOWNHOUSES AND ONE AND TWO FAMILY

The City of Cedar Rapids Building Code is hereby amended by deleting Section R313 of the International Residential Code, 2018 Edition, and by replacing said section with a new Section R313 Townhouses as follows:

One and Two Family automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed throughout all attached townhouses and one and two family dwelling units when any of the following conditions exist:

1. The townhouses are constructed in a group of more than four attached units.
2. Any individual townhouse unit of a structure having four or fewer attached townhouses or a one or two family dwelling that has a floor area greater than 4000 square feet on any one story or greater than 8,000 square feet of total floor area for all stories, excluding non-habitable areas separated from the rest of the building by a minimum of one-hour fire-resistive construction and containing smoke or heat detection interconnected with the dwelling unit smoke alarms.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses or one or two family dwellings that do not already have an automatic residential fire sprinkler system installed if said

dwellings were built before the City of Cedar Rapids adopted the 2015 International Residential Code.

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section P2904 of the International Residential Code, 2018 Edition (IRC 2018).

R313.2.1 Design and installation. Automatic residential fire sprinkler systems for one- and two-family dwellings shall be designed and installed in accordance with Section P2904 of IRC 2018.

R313.3 Alternative Methods. Maximum floor area square footages of Sections R313.1(2) herein may be increased by 25% for buildings or floors containing more than one egress door as specified in Section R311.2 herein or more than one vertical egress as specified in Section R311.4 herein or other approved alternate methods of building occupant egress enhancement. (NOTE: real sq. ft. is 5000 and 10,000 with two points of egress)

### 33.32 SECTION 903.2.8 GROUP R

Section 903.2.8 Group R is hereby amended by adding an Exception:

903.2.8 GROUP R.

Section 903.2.8 Group R is hereby amended by adding an Exception

Exception: Any change of use where a one unit Group R fire area is located in a building with any other occupancy, excluding private garages.

For the purposes of this Section, portions of a building separated by one or more fire walls shall not be considered separate buildings.

### 33.33 SECTION 903.2.11.1 Stories without openings

903.2.11.1 Stories without openings

Section 903.2.11.1 is hereby amended by deleting Section 903.2.11.1 of the International Building Code, 2018 Edition, and by replacing said section with a new Section 903.2.11.1 as follows:

903.2.11.1 Stories without openings. An automatic sprinkler system shall be installed throughout all stories, including basements and crawlspaces, of all buildings where the floor area exceeds 1,500 square feet (139.4 m<sup>2</sup>) and where the story does not comply with the following criteria for exterior wall openings:

1. Openings below grade that lead directly to ground level by an exterior stairway complying with Section 1011 or an outside ramp complying with Section 1012. Openings shall be located in each 50 linear feet (15 240 mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).
2. Openings entirely above the adjoining ground level totaling not less than 20 square feet (1.86 m<sup>2</sup>) in each 50 linear feet (15 240 mm), or fraction thereof, of exterior wall in the story on not fewer than one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).

The height of the bottom of the clear opening shall not exceed 44 inches (1118 mm) measured from the floor.

### 33.34 SECTION R314 SMOKE ALARMS

**SMOKE ALARMS.** The City of Cedar Rapids Building Code is hereby amended by deleting Section R314 of the International Residential Code, 2018 Edition, and by replacing said section with a new Section R314 as follows:

**R314.1 Smoke detection and notification.** Smoke alarms shall be listed and labeled in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

**R314.2 Smoke detection systems.** Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification devices installed as required by this section for smoke alarms, shall be permitted.

**R314.3 Location.** Smoke alarms shall be installed in all of the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each story of the dwelling including basements.

**R314.3.1 Alterations, repairs and additions.** When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the dwelling unit shall be equipped with smoke alarms in locations as required in R314.3 for new dwellings.

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of an open porch or deck, are exempt from the requirements of this section.
2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

**R314.4 Power source.** Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Exception: Hard wiring of smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring without the removal of interior finishes.

**R314.5 Interconnection.** Where more than one smoke alarm is required to be installed within an individual dwelling unit in accordance with Section R314.3 herein, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of any one alarm.

Exception: Interconnection of smoke alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without removal of interior finishes.

### 33.35 R403 FOOTINGS

Section R403 Footings is hereby amended by adding an Exception to Section R403 Footings, as follows: All single family residential structures shall have a continuous frost protected perimeter foundation for the main body of the structure. No more than 1/3 of the finished first floor sq. footage excluding attached accessory areas, unfinished spaces and unconditioned spaces shall have anything other than continuous frost protected perimeter foundation. Pier foundation systems are not defined as continuous frost protected foundations.

### 33.36 R403.1.4.1 FROST PROTECTION.

SLAB ON GRADE FOUNDATIONS. The City of Cedar Rapids Building Code is hereby amended by inserting a new Exception 3 to Section R403.1.4.1 of the International Residential Code, 2018 Edition, as follows:

Exception 3. Decks that are not the main path of egress out of the structure, and less than 36 Sq. Ft. and not supported by a dwelling need not be provided with footings that extend below the frost line.

The City of Cedar Rapids Building Code is hereby further amended by adding a new Exception (4) to Section 1809.5 of the International Building Code, 2018 Edition and R403.1.4.1 of the International Residential Code, 2018 Edition respectively, as follows:

Exception 4: Slab-on-Grade Foundations. The Building official or designee may approve slab-on-grade foundation designs for wood or metal frames, detached buildings of Group U Occupancy or accessory structures to buildings constructed under the provisions of the International Residential Code and 1250 square feet in floor area or less, without additional engineering, providing the design meets all of the following conditions:

1. Foundations supporting wood shall extend at least six inches above the adjacent finish grade.
2. The entire perimeter of the foundation shall be provided with a thickened portion of slab with cross section dimensions of 12 inches minimum width and 12 inches minimum thickness.
3. The slab floor shall be a minimum of 4 inches thick concrete with 6" x 6" reinforcing mesh or #4 reinforcing bars 24" on center front-to-back and side- to-side.
4. Slab floor and thickened edge shall be one continuous pour, interconnected with reinforcing.
5. Vertical distance from the top of the foundation floor to the lowest point of the footing base shall not be more than 24 inches.

### 33.37 FOUNDATION DRAINAGE SYSTEMS. The City of Cedar Rapids Building Code is hereby amended by deleting Section 1805.4.3 of the International Building Code, 2018 Edition, and by replacing said section with a new Section 1805.4.3 and by adding a new Section R401.3.1 to the International Residential Code, 2018 Edition, as follows:

Section 1805.4.3/R401.3.1 Drainage discharge. The floor base and foundation perimeter drain shall discharge by gravity or mechanical means into an approved drainage system that complies with the following:

A sump pit must be located inside the building.

Exception: If approved by the Building Official, the sump pit may be omitted if drainage tile can be designed with natural fall and drain on the same property.

For each sump pump installed, a pump discharge pipe shall be connected to the appropriate approved storm sewer or other appropriate approved discharge location. If no approved storm sewer connection is available the discharge point shall discharge a minimum of two (2) feet from the outside foundation wall and no closer than 10 feet from the lot line. No sump discharge may cause a hazard.

The pump discharge pipe shall be installed as per the requirements of the City of Cedar Rapids Plumbing Code with connections to the City storm sewer as per the Cedar Rapids Metropolitan Area Engineering Design Standards Manual.

Installation of a sump pump, if one is found by the Building official or designee to be necessary, shall include equipping the sump pump to automatically provide for discharge of sump pit water outside the basement wall and above grade and/or otherwise equipping the sump pump in a manner approved by the Building Official.

A sump pump will be considered to be necessary if water inside the sump pit will not recede to a level four inches or more below the lowest basement floor surface by gravity or absorption into the earth within a reasonable period of time.

Where ground water conditions warrant, the Building official or designee may require additional drainage methods or engineering as he/she deems necessary.

### 33.38 R405.1 CONCRETE OR MASONRY FOUNDATIONS EXCEPTION.

Section R405.1 Concrete or masonry foundations is hereby amended by deleting the Exception.

### 33.39 602.1.2 CENTRAL BUSINESS DISTRICT.

Section 602.1.2 Central business district is hereby added as follows:

Section 602.1.2 Central business district. Buildings or structures hereafter erected, constructed, altered, remodeled or moved within or into the Central Business District, as defined in the Cedar Rapids Fire Code, shall be of Type I and II construction as defined in section 602.2 of the 2018 IBC and shall meet materials allowed by section 603.1 with the exception of items 1, 11, 13. Fire retardant treated roof sheathing is allowed.

### 33.40 1010.1.6.1 FROST PROTECTION OF LANDINGS AT DOORS.

Section 1010.1.6.1 Frost protection of landings at doors is hereby added as follows:

Section 1010.1.6.1 Frost protection of landings at doors. Exterior landings at doors shall be provided with frost protection regardless of door swing.

### 33.41 EXCEPTION BACKWATER VALVE. The City of Cedar Rapids Building Code is hereby amended by adding a new exception to Section P3008.1 of the International Residential Code, 2018 Edition, as follows:

EXCEPTION: The requirements of this Section shall apply only at locations determined necessary by the City Engineer or Building official or designee based on local conditions.

- 33.42 SUBSURFACE LANDSCAPE IRRIGATION SYSTEMS. The City of Cedar Rapids Building Code is hereby amended by deleting Section P3009.1 from the International Residential Code, 2018 Edition, and inserting in lieu thereof the following:

P3009.1 Scope. The provisions of this Section shall be optional and for information only relating to the materials, design, construction and installation of subsurface landscape irrigation systems connected to nonpotable water from on-site water reuse systems.

- 33.43 FUEL GAS PIPING. The City of Cedar Rapids Building Code is hereby amended by deleting Section G2415.3 of the International Residential Code, 2018 Edition, and by replacing said section with a new Section G2415.3 as follows:

G2415.3 Prohibited Locations. Piping shall not be installed in or through a duct supply, return or exhaust, or a clothes chute, chimney or gas vent, dumbwaiter or elevator shaft.

- 33.44 SWIMMING POOLS AND SPAS. The City of Cedar Rapids Building Code is hereby amended by deleting Section 3109 of the International Building Code, 2018 Edition, and by replacing said section with a new Section 3109 as follows:

#### SECTION 3109 SWIMMING POOLS AND SPAS

3109.1 General. The design and construction of pools and spas shall comply with the International Swimming Pool and Spa Code, 2018 Edition.

- 33.45 1030.1 GENERAL EXCEPTION 4 AND R310.1 EMERGENCY ESCAPE AND RESCUE REQUIRED EXCEPTION 2.

Section 1030.1 General is hereby amended by adding an Exception 4, and R310.1 Emergency escape and rescue required is hereby amended by adding an Exception 2, as follows:

Section 1030.1 Exception 4 and R310.1 Exception 2. Egress windows required for remodel or finish in existing basements may have a maximum sill height measured from an elevated landing 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 window it serves.

Unobstructed access shall be maintained, both interior and exterior, at escape windows or doors for ready access of escape or rescue. If a room is to be used as a bedroom or when a room contains an area for a closet/wardrobe and/or is adjacent to a full or 3/4 bathroom, finished or not, this room will be considered to be a sleeping room by building official or designee. "Adjacent" for the purpose of this subsection shall mean: "That being on the same level or story."

For the purpose of egress in such rooms the following procedures are applicable: Provide a window/windows capable of meeting the height, width and sill heights as prescribed by code.

If said room is not intended to be used as a bedroom/sleeping room, the following alternate is acceptable: Provide an affidavit that has been recorded with the Linn County Recorder's Office to become a permanent part of the abstract for subject property listing which includes, but is not limited to, the following items:



1. Property legal description.
2. Address
3. That the purpose of finished room is not for bedroom/sleeping room purposes.

Also, a copy of the recorded document will be attached to the building permit and become part of the Building Department permanent file.

#### 33.46 1203.3 AND R408.3.1 FLOOR SURFACE, CRAWL SPACE, AND SUBBASEMENTS.

Section 1203.3 and R408.3.1 Floor surface, crawl space, and sub-basements is hereby added as follows:

Section 1203.3 and R408.3.1 Floor surface, crawl space, and subbasements. All crawl space or sub-basement floors shall be capped with a minimum of 1-1/2 inches of concrete over 6-mil vapor barrier. Said concrete mixture shall be a minimum of 1500-PSI strength.”

**SECTION 2. VALIDITY AND SEVERABILITY** The various sections, subsections, chapters or parts of this Ordinance, the International Building Code and the International Residential Code hereby adopted are hereby declared to be severable and in the event that any such part of these provisions shall be held invalid for any reason, the invalidity of such section, subsection, chapter or part shall not invalidate any other of the provisions of this Ordinance or of the International Building Code or the International Residential Code hereby adopted.

**SECTION 3. ADOPTION OF CODE** Pursuant to published notice, a public hearing has been duly conducted upon the date, time, and at the place fixed in said notice upon the adoption of this Building Code and the City Council of the City of Cedar Rapids, Iowa, hereby determines and finds that said proposed Building Code shall be and the same is hereby adopted as an ordinance of the City of Cedar Rapids, Iowa.

**SECTION 4. CODE ON FILE** An official copy of the 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.

**SECTION 5. EFFECTIVE DATE** Following its passage and publication, this Ordinance shall be in full force and effect as provided by law.

Introduced this 23rd day of April, 2019.

Passed this 14th day of May, 2019.

Voting: Council member Olson (Scott) moved the adoption of the ordinance; seconded by Council member Overland. Adopted, Ayes, Council members Hoeger, Olson (Scott), Olson (Tyler), Overland, Poe, Todd, Vanorny, Weinacht and Mayor Hart.

  
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Bradley G. Hart, Mayor

Attest:

  
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Amy Stevenson, City Clerk