

ORDINANCE NO. 1643

AN ORDINANCE TO REPEAL CHAPTER 6 – BUILDINGS AND REPLACE WITH THE FOLLOWING:

BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF MADISON, SOUTH DAKOTA:

That Chapter 6 of the Revised Ordinances of the City of Madison, also known as the Code of Ordinances, be replaced to read as follows:

Chapter 6

BUILDINGS*

- Art. I. In General, 6-1-6-15**
- Art. II. Building Codes, 6-16-6-20**

ARTICLE I. IN GENERAL

Sec. 6-1-6-15. Reserved.

ARTICLE II. BUILDING CODES

Sec. 6-16. Building Codes.

- (a) There is hereby adopted the 2021 International Residential Code for One- and Two-Family Dwellings, Chapters 1-10, 41 and 44, and Appendix AE, AH-AK, AM, AQ-AW for one- and two-family dwellings only.
- (b) There is hereby adopted the 2018 International Building Code, Chapters 1-12, 14-26, 30-33, 35, and Appendix C, and E-J for all occupancies except one- and two-family dwellings.
- (c) There is hereby adopted the 2021 International Mechanical Code, Chapters 1-15, and Appendix A and C.
- (d) There is hereby adopted the 2021 International Existing Building Code, Chapters 1-16, and Appendix B and C and Resource A.
- (e) There is hereby adopted the 2021 International Property Maintenance Code, Chapters 1-8, and Appendix A.
- (f) The Building Official shall be appointed by and work under the supervision of the Director of Engineering and Community Development.
- (g) The Building Official shall utilize for reference in the ordinary course of duties the Handbook for South Dakota Building Officials and Design Professionals as adopted by the South Dakota Board of Technical Professionals.

Sec. 6-16.1. Amendments – International Residential Code.

- (1) *IRC Chapter 1, Section R101 General, R101.2 Scope*
R101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height.

(2) *IRC Chapter 1, Section R105 Permits, R105.2 Work exempt from permit.*

R105.2. Work exempt from permit. Exemption 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. Permits shall not be required for the following:

Building:

- 1) One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.
- 2) Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
- 3) Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2 to 1.
- 4) Painting, papering, tiling, carpeting, countertops and similar finish work.
- 5) Prefabricated swimming pools that are less than 24 inches deep.
- 6) Swings and other playground equipment.
- 7) Window awnings supported by an exterior wall which do not project more than 54 inches from the exterior wall and do not require additional support.
- 8) Replacement of like siding and roofing.
- 9) Gutters, downspouts, and storm windows.

(3) *IRC Chapter 1, Section R105 Permits, R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas.*

R105.3.1.1 Determination of substantially improved or substantially damaged existing buildings in flood hazard areas. For applications for reconstruction, rehabilitation, addition or other improvement of existing buildings or structures located in an area prone to flooding as established by Table R301.2(1), the Building Official shall examine or cause to be examined the construction documents and shall prepare a finding with regard to the value of the proposed work. For buildings that have sustained damage of any origin, the value of the proposed work shall include the cost to repair the building or structure to its pre-damage condition. If the Building Official finds that the value of proposed work equals or exceeds 50 percent of the market value of the building or structure before the damage has occurred or the improvement is started, the construction shall meet the requirements of Section R322.

(4) *IRC Chapter 1, Section R106 Construction Documents, R106.1 Submittal documents.*

R106.1 Submittal documents. Construction documents, special inspection and structural observation programs and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed; including all applicable state statutes. The Building Official shall utilize materials published by the South Dakota Board of Technical Professions for assistance with definitions and interpretations of state statutes. Where special conditions exist, the Building Official is authorized to require additional construction documents to be prepared by a registered design professional. Plans and specifications for hotels, motels, boarding or rooming houses, and buildings that contain six (6) or more dwelling units as defined by the City Zoning Ordinance shall be prepared, designed and certified by a licensed design professional.

- (5) *IRC Chapter 1, Section R106 Construction Documents, R106.2 Site plan or plot plan.*
R106.2 Site plan or plot plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing the size and location of new construction and existing structures on the site and distances from lot lines. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The applicant is obligated prior to the issuance of the building permit to provide satisfactory evidence to the Building Official relative to the location of applicable property corners so that the Building Official or authorized representative can verify set back compliance of the proposed structure.
- (6) *IRC Chapter 1, Section R106 Construction Documents, R106.3 Examination of documents.*
R106.3 Examination of documents. The Building Official shall examine or cause to be examined construction documents for code compliance. Neither examination and review of construction and/or construction documents by the Building Official, nor the issuance of a building permit by the Building Official, shall relieve the permit applicant of the responsibility and duty to comply with this code and or any other applicable local, state and federal rules, regulations and ordinances.
- (7) *IRC Chapter 1, Section R106 Construction Documents, R106.3.1 Approval of construction documents.*
R106.3.1 Approval of construction documents. Before the Building Official issues a permit, the construction documents shall be submitted and reviewed. One set of construction documents so reviewed shall be retained by the Building Official.
- (8) *IRC Chapter 1, Section R112 Board of Appeals, R112.1 General.*
R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the City Commission. The appeal shall be submitted on a form provided by the Building Official. The applicant for any such appeal shall provide with the aforementioned form a written supplemental justification for granting said appeal for projects which are not exempt pursuant to South Dakota Codified Law 38-18A-2 and 38-18A-3 from the registered engineer or architect of record or, for projects which are exempt from the aforementioned statutes, from a registered design professional who is familiar with the design concept of subject structure. The Building Official shall provide written recommendation to the Board for each appeal. Approval or denial of any appeal shall be by a two-thirds (2/3) majority of all the members of the Board. The Board shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official.
- (9) *IRC Chapter 1, Section R112 Board of Appeals, R112.2 Limitations on authority.*
R112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intend of this code or the rules legally adopted thereunder have been incorrectly interpreted or the provisions of this code do not fully apply. The board shall not have the authority relative to the administrative provisions of this code nor shall the board be empowered to waive requirements of this code.
- (10) *IRC Chapter 1, Section R112 Board of Appeals, R112.3 Qualifications*
Delete entire section.
- (11) *IRC Chapter 3, Section R301.2 Climatic and geographic design criteria.*
Table R301.2(1) Climatic and Geographic Design Criteria, is amended as follows:
- 1) Ground Snow Load: 40 psf contour
 - 2) Wind Speed^d: 115 mph
 - 3) Topographic effects^k: No
 - 4) Seismic Design Category^f: A

- 5) Weathering^a: Severe
- 6) Frost Line Depth^b: 42 inches (1,067 mm)
- 7) Termite^c: Slight to Moderate
- 8) Winter Design Temperature^c: -11.5 Degrees Fahrenheit
- 9) Ice Barrier Underlayment Requirement^h: Yes
- 10) Flood Hazards^g: (a) August , 1974 (b) September 2, 2009 (c) 46079C0144C, 46079C0163C, 46079C0164C, 46079C0232C, 46079C0251C, Effective Dates September 2, 2009
- 11) Air Freezing Indexⁱ: 3,000
- 12) Mean Annual Temperature^j: 46 degrees Fahrenheit

(12) *IRC Chapter 3 Section R302 Fire-Resistant Construction, R302.1 Exterior walls.*

R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).

Exceptions:

- 1) Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the fire separation distance.
- 2) Walls of dwellings and accessory structures located on the same lot.
- 3) Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.
- 4) Detached garages accessory to a dwelling located within 2 feet (610 mm) of a lot line are permitted to have roof eave projections not exceeding 4 inches (102 mm) and walls rated for exposure from one side.
- 5) Foundation vents installed in compliance with this code are permitted.

(13) *IRC Chapter 3 Section R302 Fire-Resistant Construction, R302.1 Exterior walls*
Table R302.1(1) Exterior Walls

Exception: The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhangs of detached accessory structures where fire separation distance is 1'-8" or more.

(14) *IRC Chapter 3, Section R302 Fire-Resistant Construction, R302.5.1 Opening protection.*

R301.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

(15) *IRC Chapter 3, Section R302 Fire-Resistant Construction, R302.13 Fire protection of floors.*

Delete entire section

- (16) *IRC Chapter 3, Section R303 Light, Ventilation and Heating, R303.4 Mechanical ventilation.*
R303.4 Mechanical ventilation. The dwelling unit shall be provided with whole-house mechanical ventilation in accordance with Section M1507.3.

Exception: Where the air infiltration rate of a dwelling unit is greater than 5 air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c. (50 Pa) in accordance with Section N1102.4.1.2, whole-house mechanical ventilation in accordance with Section M1507.3 is not required.

- (17) *IRC Chapter 3, Section R307 Toilet, Bath and Shower Spaces, R307.1 Space required.*
R307.1 Space required. Fixtures shall be spaced in accordance with Figure R307.1., and in accordance with the requirements of Section P2705.1.

Exception: All clearances in front of fixtures shall be 24 inches.

- (18) *IRC Chapter 3, Section R309 Garages and Carports, R309.5 Fire sprinklers.*
Delete entire section.

- (19) *IRC Chapter 3, Section R310 Emergency Escape and Rescue Openings, R310.2.1 Minimum size.*
R310.2.1 Minimum opening area. All emergency escape and rescue openings shall have a minimum net clear opening of not less than 5.7 square feet (0.530 m²).

Exception: None

- (20) *IRC Chapter 3, Section 311 Means of Egress, R311.3.1 Floor elevations at the required egress doors.*
R311.3.1 Floor elevations at the required egress doors. Landings or finished floors at the required egress door shall be not more than 1 ½ inches (38 mm) lower than the top of the threshold.
Exception: The landing or floor on the exterior side shall be not more than 8 inches (203.2 mm) below the top of the threshold provided the door does not swing over the landing or floor.

- (21) *IRC Chapter 3, Section R311 Means of Egress, R311.7.5.1 Risers.*
R311.7.5.1 Risers. The maximum riser height shall be 8 inches (203 mm). The riser 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 (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted on interior stairways provided that the opening between treads does not permit the passage of a 4-inch-diameter (102 mm) sphere. Open risers are permitted on exterior stairways.

- (22) *IRC Chapter 3, Section R311 Means of Egress, R311.7.8.5 Grip size*
R311.7.8.5 Grip size. Required handrails shall be of one of the following types or provide equivalent graspability.
1. Type I. Handrails with a circular cross section shall have an outside diameter of not less than 1 1/4 inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular, it shall have a perimeter of not less than 4 inches (102 mm) and not greater than 6 1/4 inches (160 mm) and a cross section of not more than 2 1/4 inches (57 mm). Edges shall have a radius of not less than 0.01 inch (0.25 mm).
2. Type II. Handrails with a perimeter greater than 6 1/4 inches (160 mm) shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and have a depth of not less than 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for not less than 3/8 inch (10 mm) to a level that is not less than 13/4 inches (45 mm) below the tallest portion of the profile. The width of the handrail above the recess shall be not less than 1 1/4 inches (32 mm) and not more than 2 ¾ inches (70 mm). Edges shall have a radius of not less than 0.01 inch (0.25 mm).

Exception: Exterior stairs are allowed to have a horizontal 2X member to form a 1 1/2-inch graspable dimension in lieu of the above-referenced perimeter dimensions.

(23) *IRC Chapter 3, Section R313 Automatic Sprinkler Systems, R313.1 Townhouse automatic fire sprinkler systems.*

Delete entire section.

(24) *IRC Chapter 3, Section R313 Automatic Sprinkler Systems, R313.2 One- and two-family dwellings automatic fire sprinkler systems.*

Delete entire section.

(25) *IRC Chapter 3, Section R313 Automatic Sprinkler Systems, R313.2.1 Design and installation.*

R313.2.1 Design and installation. When automatic residential sprinkler systems are installed, they shall be designed and installed in accordance with P2904 or NFPA 13D.

(26) *IRC Chapter 4, Section 403 Footings, R403.1.4.1 Frost protection.*

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

- 1) Extended below the frost line specified in Table R301.2.(1);
- 2) Constructing in accordance with Section R403.3;
- 3) Constructing in accordance with ASCE 32; or
- 4) Erected on solid rock.

Exceptions:

- a) Protection of freestanding accessory structures with an area of 1500 square feet or less, of light-framed construction, with an eave height of 10 feet (3048mm) or less shall not be required.
- b) Protection of freestanding accessory structures with an area of 600 square feet or less, of other than light-framed construction, with an eave height of 10 feet (3048 mm) or less shall not be required.

(27) *IRC Chapter 5 Section R502 Wood Floor Framing, R502.3.1 Sleeping areas and attic joists.*

R502.3.1 Sleeping areas and attic joists. Table R502.3.1(1) shall be used to determine the maximum allowable span of floor joists that support sleeping areas and attics that are accessed by means of a fixed stairway in accordance with Section R311.7 provided that the design live load does not exceed 40 pounds per square foot (1.92 kPa) and the design dead load does not exceed 20 pounds per square foot (0.96 kPa). The allowable span of ceiling joists that support attics used for limited storage or no storage shall be determined in accordance with Section R802.5.

(28) *IRC Chapter 5 Section R507 Exterior Decks, R507.3.1 Minimum Size.*

R507.3.1 Minimum Size. Table R507.3.1 not adopted.. Size shall be based on tributary load.

(29) *IRC Chapter 11, Section N1102 (R402) Building Thermal Envelope, Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements by Component.*

Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements by Component, is amended as follows for Climate Zone 6:

Fenestration U-Factor^b: 0.32

Skylight^b U-Factor: 0.55
Glazed Fenestration SHGC^{b,e}: NR
Ceiling R-Value: 49
Wood Frame Wall R-Value: 20 or 13+5h
Mass Wall R-Valueⁱ: 15/19
Floor R-Value: 30^g
Basement^c Wall R-Value: 10/13
Slab^d R-Value & Depth: 10, 4 ft.
Crawl Space Wall R-Value: 10/13

6-16.2 Amendment - 2021 International Building Code.

- (1) *IBC Chapter 1, Section 101 Scope and General Requirements*
[A] 101.1 Title. These regulations shall be known as the Building Code of the City of Madison, hereinafter referred to as “this code”
- (2) *IBC Chapter 1, Section [A] 101.4.3 Plumbing.*
Delete entire section.
- (3) *IBC Chapter 1, Section [A] 105.2 Work exempt from permit.*
[A] 105.2 Work exempt from permit. 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. Permits shall not be required for the following:

Building:

- 1) One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.
- 2) Oil derricks.
- 3) Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- 4) Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
- 5) Painting, papering, tiling, carpeting, countertops and similar finish work.
- 6) Temporary motion picture, television and theater stage sets and scenery.
- 7) Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches deep, do not exceed 5,000 gallons and are installed entirely above ground.
- 8) Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 9) Swings and other playground equipment accessory to detached one- and two-family dwellings.

- 10) Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support..
 - 11) Non fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.
 - 12) Replacement of like siding and roofing.
 - 13) Gutters, downspouts, and storm windows.
- (4) *IBC Chapter 1, Section 107 Submittal Documents, [A] 107.1 General.*
[A] 107.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in one or more sets with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed, including all applicable state statutes. The Building Official shall utilize materials published by the South Dakota Board of Technical Professions for assistance with definitions and interpretations of state statutes. Where special conditions exist, the Building Official is authorized to require additional construction documents to be prepared by a registered design professional. Plans and specifications for hotels, motels, boarding or rooming houses, and buildings that contain six (6) or more dwelling units as defined by the City Zoning Ordinance shall be prepared, designed and certified by a licensed design professional.
- (5) *IBC Chapter 1, Section 107 Submittal Documents, [A] 107.2.6 Site plan.*
[A] 107.2.6 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The Building Official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted. The applicant is obligated prior to the issuance of the building permit to provide satisfactory evidence to the Building Official relative to the location of applicable property corners so that the Building Official or authorized representative can verify set back compliance of the proposed structure.
- (6) *IBC Chapter 1, Section 107 Submittal Documents, [A] 107.3 Examination of documents.*
[A] 107.3 Examination of documents. The Building Official shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances. Neither examination and review of construction and/or construction documents by the Building Official, nor the issuance of a building permit by the Building Official, shall relieve the permit applicant of the responsibility and duty to comply with this code and or any other applicable local, state and federal rules, regulations, and ordinances.
- (7) *IBC Chapter 1, Section 107 Submittal Documents, [A] 107.3.1 Approval of construction documents.*
[A] 107.3.1 Approval of construction documents. Before the Building Official issues a permit, the construction documents shall be submitted and reviewed. One set of construction documents so reviewed shall be retained by the Building Official.
- (8) *IBC Chapter 1, Section 113 Means of Appeals, [A] 113.1 General.*
[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the City Commission. The appeal shall be submitted on a form provided by the Building Official stating incorrect interpretation or nonapplicable

provision of code. The applicant for any such appeal shall provide with the aforementioned form a written supplemental justification for granting said appeal for projects which are not exempt pursuant to South Dakota Codified Law 38-18A-2 and 38-18A-3 from the registered engineer or architect of record or, for projects which are exempt from the aforementioned statutes, from a registered design professional who is familiar with the design concept of subject structure. The Building Official shall provide written recommendation to the Board for each appeal. Approval or denial of any appeal shall be by a two-thirds (2/3) majority of all the members of the Board. The Board shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official.

(9) *IBC Chapter 1, Section 113 Means of Appeals, [A] 113.2 Limitations on authority.*

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted or the provisions of this code do not fully apply. The board shall not have the authority relative to the administrative provisions of this code nor shall the board be empowered to waive requirements of this code.

(10) *IBC Chapter 1, Section 113 Means of Appeals, [A] 113.3 Qualifications.*

Delete entire section.

(11) *IBC Chapter 7, Section 706 Fire Walls, 706.6.2 Buildings with sloped roofs.*

706.6.2 Buildings with sloped roofs. Where a fire wall serves as an interior wall for a building, and the roof on one side or both sides of the fire wall slopes toward the fire wall at a slope greater than two units vertical in 12 units horizontal (2:12), the fire wall shall extend to a height equal to the height of the roof located 4 feet (1219 mm) from the fire wall plus 30 inches (762 mm). The extension of the fire wall shall be not less than 30 inches (762 mm).

Exception: The fire wall may terminate at the underside of the roof sheathing, deck, or slab of the lower roof, provided:

1. The roof assemblies within 10 feet (3,048 mm) of the wall has not less than a 1-hour fire resistance rating and the entire length and span of supporting elements for the rated roof assembly has a fire-resistance rating of not less than 1 hour.

2. Openings in the roof on each side of the fire wall shall not be located within 10 feet (3,048 mm) of the fire wall.

(12) *IBC Chapter 9, Section 903 Automatic Sprinkler Systems, [F] 903.2.8 Group R.*

[F] 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with Groups R-1 and R-4 fire areas and Group R-2 multifamily residences of six or more dwelling units.

(13) *IBC Chapter 10, Section 1011 Stairways, 1011.5.2 Riser height and tread depth.*

1011.5.2 Riser height and tread depth. Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the nosings of adjacent treads. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's nosing. Winder treads shall have a minimum tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and a minimum tread depth of 10 inches (254 mm) within the clear width of the stair.

Exceptions:

1) Spiral stairways in accordance with Section 1011.10.

2) *Stairways* connecting stepped *aisles* to cross *aisles* or concourses shall be permitted to use the riser/tread dimension in Section 1029.14.2.

- 3) In Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual *dwelling units* in Group R-2 occupancies; the maximum riser height shall be 8 inches (203 mm); the minimum tread depth shall be 10 inches (254 mm); the minimum winder tread depth at the walkline shall be 10 inches (254 mm); and the minimum winder tread depth shall be 6 inches (152 mm). A nosing projection not less than 3/4 inch (19.1 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).
 - 4) See Section 503.1 of the *International Existing Building Code* for the replacement of existing *stairways*.
 - 5) In Group I-3 facilities, *stairways* providing access to guard towers, observation stations and control rooms, not more than 250 square feet (23 m²) in area, shall be permitted to have a maximum riser height of 8 inches (203 mm) and a minimum tread depth of 9 inches (229 mm).
- (14) *IBC Chapter 10, Section 1030 Emergency Escape and Rescue, 1030.2 Minimum size.*
1029.2 Minimum size. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet. Exception: None
- (15) *IBC Chapter 16, Section 1612 Flood Loads, 1612.3 Establishment of flood hazard areas.*
1612.3 Establishment of flood hazard areas. To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled “The Flood Insurance Study for the City of Madison,” dated September 2, 2009, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.
- (16) *IBC Chapter 18, Section 1809 Shallow Foundations, 1809.5 Frost protection.*
1809.5 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected by one or more of the following methods:
- 1) Extending below the frost line of the locality;
 - 2) Constructing in accordance with ASCE 32; or
 - 3) Erecting on solid rock.
- Exception: Free-standing buildings meeting all of the following conditions shall not be required to be protected:
- a) Assigned to *Risk Category I*, in accordance with Section 1604.5;
 - b) Area of 1500 square feet or less for light-frame construction or 600 square feet or less for other than light-frame construction; and
 - c) Eave height of 10 feet (3048 mm) or less.

Sec. 6-16.3 Amendments – International Existing Building Code.

- (1) *IEBC Chapter 1, Section 104 Duties and Powers of Code Official, [A] 104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.*
[A] 104.2.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, addition or other improvement of existing buildings or structures located in an area prone to flooding as established by Table R301.2(1), the Building Official shall examine or cause to be examined the construction documents and

shall prepare a finding with regard to the value of the proposed work. For buildings that have sustained damage of any origin, the value of the proposed work shall include the cost to repair the building or structure to its pre-damage condition. If the Building Official finds that the value of proposed work equals or exceeds 50 percent of the market value of the building or structure before the damage has occurred or the improvement is started, the construction shall meet the requirements of Section 1612 of the International Building Code as adopted and Section R322 of the International Residential Code, as adopted and as applicable.

(2) *IEBC Chapter 1, Section 105 Permits, [A] 105.2 Work exempt from permit.*

[A] 105.2. Work exempt from permit. Exemption 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. Permits shall not be required for the following:

Building:

- 1) One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.
- 2) Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
- 3) Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2 to 1.
- 4) Painting, papering, tiling, carpeting, countertops and similar finish work.
- 5) Prefabricated swimming pools that are less than 24 inches deep.
- 6) Swings and other playground equipment.
- 7) Window awnings supported by an exterior wall which do not project more than 54 inches from the exterior wall and do not require additional support.
- 8) Replacement of like siding and roofing.
- 9) Gutters, downspouts, and storm windows.

(3) *IEBC Chapter 1, Section 106 Construction Documents, [A] 106.1 General.*

[A] 106.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in one or more sets with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed, including all applicable state statutes. The Building Official shall utilize materials published by the South Dakota Board of Technical Professions for assistance with definitions and interpretations of state statutes. Where special conditions exist, the Building Official is authorized to require additional construction documents to be prepared by a registered design professional. Plans and specifications for hotels, motels, boarding or rooming houses, and buildings that contain six (6) or more dwelling units as defined by the City Zoning Ordinance shall be prepared, designed and certified by a licensed design professional.

(4) *IEBC Chapter 1, Section 106 Construction Documents, [A] 106.2.6 Site plan.*

[A] 106.2.6 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing

structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The Building Official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted. The applicant is obligated prior to the issuance of the building permit to provide satisfactory evidence to the Building Official relative to the location of applicable property corners so that the Building Official or authorized representative can verify set back compliance of the proposed structure.

- (5) *IEBC Chapter 1, Section 106 Submittal Documents, [A] 106.3 Examination of documents.*
[A] 106.3 Examination of documents. The Building Official shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances. Neither examination and review of construction and/or construction documents by the Building Official, nor the issuance of a building permit by the Building Official, shall relieve the permit applicant of the responsibility and duty to comply with this code and or any other applicable local, state and federal rules, regulations, and ordinances.
- (6) *IEBC Chapter 1, Section 106 Submittal Documents, [A] 106.3.1 Approval of construction documents.*
[A] 106.3.1 Approval of construction documents. Before the Building Official issues a permit, the construction documents shall be submitted and reviewed. One set of construction documents so reviewed shall be retained by the Building Official.
- (7) *IEBC Chapter 1, Section 112 Means of Appeals, [A] 112.1 General.*
[A] 112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the City Commission. The appeal shall be submitted on a form provided by the Building Official stating incorrect interpretation or nonapplicable provision of code. The applicant for any such appeal shall provide with the aforementioned form a written supplemental justification for granting said appeal for projects which are not exempt pursuant to South Dakota Codified Law 38-18A-2 and 38-18A-3 from the registered engineer or architect of record or, for projects which are exempt from the aforementioned statutes, from a registered design professional who is familiar with the design concept of subject structure. The Building Official shall provide written recommendation to the Board for each appeal. Approval or denial of any appeal shall be by a two-thirds (2/3) majority of all the members of the Board. The Board shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official.
- (8) *IEBC Chapter 1, Section 112 Means of Appeals, [A] 112.2 Limitations on authority.*
[A] 112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted or the provisions of this code do not fully apply. The board shall not have the authority relative to the administrative provisions of this code nor shall the board be empowered to waive requirements of this code.
- (9) *IEBC Chapter 1, Section 112 Means of Appeals, [A] 112.3 Qualifications.*
Delete entire section.
- (10) *IEBC Chapter 13, Section 1301 General, 1301.6.17 Automatic sprinklers.*
1301.6.17 Automatic sprinklers. Evaluate the ability to suppress or control a fire based on the installation of an automatic sprinkler system in accordance with Section 903.3.1 of the International Building Code as adopted. "Required sprinklers" shall be based on the requirements of the International Building Code as adopted. Under the categories and occupancies in Table 1301.6.17, determine the appropriate value and enter that value into Table 1301.7 under Safety Parameter 1301.6.17, Automatic Sprinklers, for fire safety,

means of egress divided by 2, and general safety. High-rise buildings defined in Chapter 2 of the International Building Code that undergo a change of occupancy to Group R shall be equipped throughout with an automatic sprinkler system in accordance with Section 403 of the International Building Code and Chapter 9 of the International Building Code as adopted. Facilities in Group I-2 occupancies meeting Category a, b, c or f shall be considered to fail the evaluation height with a separate means of egress and their accessory structures not more than three stories above grade plane in height.

Sec. 6-16.4 Amendments – International Property Maintenance Code.

(1) *IPMC Chapter 1, Section 107 Means of Appeal, 107.1 General.*

107.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the City Commission. The appeal shall be submitted on a form provided by the Building Official stating incorrect interpretation or nonapplicable provision of code. The applicant for any such appeal shall provide with the aforementioned form a written supplemental justification for granting said appeal for projects which are not exempt pursuant to South Dakota Codified Law 38-18A-2 and 38-18A-3 from the registered engineer or architect of record or, for projects which are exempt from the aforementioned statutes, from a registered design professional who is familiar with the design concept of subject structure. The Building Official shall provide written recommendation to the Board for each appeal. Approval or denial of any appeal shall be by a two-thirds (2/3) majority of all the members of the Board. The Board shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official.

(2) *IPMC Chapter 1, Section 107 Means of Appeal, 107.2 Limitations on authority.*

[A] 107.2 Limitations on authority. An application for appeal shall be based on a claim that the true intend of this code or the rules legally adopted thereunder have been incorrectly interpreted or the provisions of this code do not fully apply. The board shall not have the authority relative to the administrative provisions of this code nor shall the board be empowered to waive requirements of this code.

(3) *IPMC Chapter 1, Section 107 Means of Appeal, 107.3 Qualifications.*

Delete entire section.

(4) *IPMC Chapter 1, Section 108 Board of Appeals, [A] 108.1 Membership of board.*

[A] 108.1 Membership of board. In order to hear and decide appeals of orders, decisions or determinations made by the Building Official relative to the application and interpretation of this code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the City Commission. The appeal shall be submitted on a form provided by the Building Official. The applicant for any such appeal shall provide with the aforementioned form a written supplemental justification for granting said appeal. The Building Official shall provide written recommendation to the Board for each appeal. Approval or denial of any appeal shall be by a two-thirds (2/3) majority of all the members of the Board. The Board shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official.

Section 6-16.5 General Provisions.

The adopted Codes along with the City of Madison Guidelines for Residential Construction shall hereby be considered the Code. If any provision of the adopted Codes is in conflict with the City of Madison Guidelines for Residential Construction, said Guidelines shall prevail.

Section 6-16.6 Building Permit Fees.

Notwithstanding other provisions of the 2021 International Residential Code, 2021 International Building Code, 2021 International Mechanical Code, 2021 International Property Maintenance Code, and 2021 International Existing Building Code, the fee for a building permit shall be as follows.

<i>Building Permit Fees</i>	
Total Cost of Construction	Fees
\$0.00 - \$500.00	\$10.00
\$501.00 - \$1,000.00	\$25.00
\$1,001.00 - \$25,000.00	\$25.00 for the first \$1,000.00 plus \$9.00 for each additional \$1,000.00 to and including \$25,000.00
\$25,001.00 - \$50,000.00	\$241.00 for the first \$25,000.00 plus \$6.50 for each additional \$1,000.00 to and including \$50,000.00
\$50,001.00 - \$100,000.00	\$403.50 for the first \$50,000.00 plus \$4.50 for each additional \$1,000.00 to and including \$100,000.00
\$100,001.00 - \$500,000.00	\$628.50 for the first \$100,000.00 plus \$3.50 for each additional \$1,000.00 to and including \$500,000.00
\$500,001.00 - \$1,000,000.00	\$2028.50 for the first \$500,000.00 plus \$3.00 for each additional \$1,000.00 to and including \$1,000,000.00
\$1,000,001.00 and up	\$3,528.50 for the first \$1,000,000.00 plus \$2.00 for each additional \$1,000.00 thereafter

<i>Flat fees:</i>	
Non-like roofing only	\$20.00
Non-like siding only	\$20.00
Demolition	\$10.00
Manufactured Homes on rental lots	\$25.00
Resurfacing of parking lot	\$25.00

The base valuation to determine permit fees for new residential buildings are at minimum based on a dollar per square foot schedule per the Building Valuation Data table and then applied to the chart above. For all other work, the total price is the base valuation and that value shall apply to the fee chart above.

Sec. 6-17. Conflicts.

If any provision of the Code adopted by this article is in conflict with any other Ordinance, this Ordinance shall prevail.

Sec. 6-18. Fire limits.

Deleted.

Sec. 6-19. Permit for basements.

Deleted.

Sec. 6-20. Amendment – 2021 International Mechanical Code.

- (1) Notwithstanding other provisions in the 2018 International Mechanical Code, the Building Official shall not be required to personally inspect specific items referenced in said code being constructed, reconstructed, or remodeled under a building permit at any time. Any provision in said code directing a personal inspection by the building official is hereby repealed; provided that nothing herein shall prohibit the inspection of any building by the building official as provided in said code and said official is hereby authorized to enforce all provisions of said code as prescribed in said code.

Dated this 21st day of March, 2022.

CITY OF MADISON

/s/Marshall Dennert
Mayor

ATTEST: /s/Sonya Wilt
Finance Officer

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