

OFFICE OF THE CITY ATTORNEY  
FARGO, NORTH DAKOTA

ORDINANCE NO. 5216

AN ORDINANCE REPEALING AND RE-ENACTING ARTICLE 21.1-01 OF  
CHAPTER 21.1 OF THE FARGO MUNICIPAL CODE  
RELATING TO THE INTERNATIONAL RESIDENTIAL CODE

WHEREAS, the electorate of the City of Fargo has adopted a home rule charter in accordance with Chapter 40-05.1 of the North Dakota Century Code; and

WHEREAS, Section 40-05.1-06 of the North Dakota Century Code provides that the City shall have the right to implement home rule powers by ordinance; and

WHEREAS, Section 40-05.1-05 of the North Dakota Century Code provides that said home rule charter and any ordinances made pursuant thereto shall supersede state laws in conflict therewith and shall be liberally construed for such purpose; and

WHEREAS, the Board of City Commissioners deems it necessary and appropriate to implement such authority by the adoption of this ordinance;

NOW, THEREFORE,

Be it Ordained by the Board of City Commissioners of the City of Fargo:

Section 1. Repeal.

Article 21.1-01 of Chapter 21.1 of the Fargo Municipal Code is hereby repealed in its entirety.

Section 2. Re-enactment.

Article 21.1-01 of Chapter 21.1 of the Fargo Municipal Code is hereby re-enacted to read as follows:

CHAPTER 21.1

INTERNATIONAL RESIDENTIAL CODE

Article

21.1-01      International Residential Code--Adoption—Amendments, §§ 21.1-0101 to  
21.1-0102

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ARTICLE 21.1-01

Section

21.1-0101 Adoption of International Residential Code by Reference

21.1-0102 Amendment to International Residential Code

21.1-0101. Adoption of International Residential Code by Reference.--There is hereby adopted by reference by the Board of City Commissioners, for the purpose of prescribing regulations governing standards, relative to housing in the city of Fargo, that certain code known as the International Residential Code recommended and compiled by the International Code Council, being particularly the 2018 Edition thereof, a copy of which is on file in the office of the City Auditor, and the same is hereby adopted and incorporated as fully as if set out in length herein, and from the date on which this ordinance shall take effect, the provisions thereof shall be controlling within the limits of the city, and within the extra-territorial zoning jurisdiction of the city.

21.1-0102. Amendment to International Residential Code.--The International Residential Code as adopted in Section 21.1-0101 is hereby changed and amended as follows:

**Section R101.1** is hereby amended to read as follows:

**Section R101.1 Title.** These provisions shall be known as the *Residential Code for One- and Two-Family Dwellings* of ~~[NAME OF JURISDICTION]~~ the city of Fargo, and shall be cited as such and will be referred to herein as “this code.”

**Section R104.8** is hereby amended to read as follows:

**Section R104.8. Liability.** The *building official*, member of the board of appeals or employee charged with the enforcement of this code, while acting for the *jurisdiction* in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects, nor shall the code enforcement

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agency or the city be held as assuming any such liability by reason of the inspection authorized by this code or any permits or certificates issued under this code.

**Section R104.8.1** is hereby amended to read as follows:

**Section R104.8.1 Legal defense.** Any suit or criminal complaint instituted against an officer or employee because of an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the immunities and defenses provided by other applicable local, state or federal laws. ~~and shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings.~~ The *building official* or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**Section R104.10.1** is hereby deleted in its entirety.

**Section R105.2** is hereby amended to read as follows:

**Section 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*, provided that the floor area does not exceed ~~200~~ 120 square feet (~~185.8 m<sup>2</sup>~~).
2. Fences not over ~~7~~ 8 ½ feet (~~2134 mm~~) high.

\* \* \*

7. ~~Prefabricated~~ Sswimming pools, ~~that are less than 24 inches (610 mm) deep.~~

\* \* \*

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9. Window awnings 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.
10. Decks not exceeding ~~200-120 square feet (185.8 m<sup>2</sup>)~~ in area, that are not more than ~~30 (762 mm)~~ 7 inches above *grade* at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.

**Section R105.3.1.1** is hereby deleted in its entirety.

**Section R106.1.4** is hereby deleted in its entirety.

**Section R106.4** is hereby deleted in its entirety.

**Section R108.3** is hereby amended to read as follows:

**Section R108.3 Building permit violations.** Building *permit* valuation shall include total value of the work for which a *permit* is being issued, such as electrical, gas, mechanical, plumbing *equipment* and other permanent systems, including materials and labor. If, in the opinion of the *building official*, the valuation is underestimated on the application, the *permit* shall be denied, unless the applicant can show detailed estimates to meet the approval of the *building official*. Final building *permit* valuation shall be set by the *building official*.

**Section R201.3** is hereby amended to read as follows:

**Section R201.3 Terms defined in other codes.** Where terms are not defined in this code such terms shall have meanings ascribed in other code publications of the International Code Council. Wherever the term *International Plumbing Code* or *International Private Sewage Disposal Code* is used in the *International Residential Code*, it shall mean the North Dakota State Plumbing Code. Wherever the term *ICC Electrical Code* is used in the *International Residential Code*, it shall mean the National Electrical Code and the North Dakota State Wiring Standards. Wherever reference is made to flood plain requirements, it shall mean Article 21-06 of the Fargo Municipal Code relating to Flood Plain Management and the Fargo Flood Proofing Code.

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**Table R301.2(1)** is hereby amended to include the following entries from left to right within the table:

Table 301.2(1)													
Climactic and Geographic Design Criteria													
Ground Snow Load	Wind Design				Seismic Design Category	Subject to Damage From			Winter Design Temp	Ice Barrier Underlayment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed (mph)	Topographic Effects	Special Wind Region	Windoborne Debris Zone		Weathering	Frost Line Depth	Termit e					
50	115	No	No	No	Zone A	Severe	4.5'	None	-18°	Yes	1978	4000	41.5°
Manual J Design Criteria													
Elevation	Lattitude	Winter Heating	Summer Cooling	Altitude Correction Factor	Indoor Design Temperature	Design Temperature Cooling	Heating Temperature Difference						
869	46	-17°	88°	None	70°	75°	87°						
Cooling Temperature Difference	Wind Velocity Heating	Wind Velocity Cooling	Coincident Wet Bulb	Daily Range	Winter Humidity	Summer Humidity							
13°	15 mph	7.5 mph	70	M	30%	50%							

**Section R301.2.4** is hereby deleted in its entirety.

**Table R302.1(1) Exterior Walls.** The fourth column is hereby amended as follows

0 3 feet  
~~≥ 5~~ 3 feet  
 < 2 feet  
 ≥ 2 feet to < ~~5~~ 3 feet  
~~≥ 5~~ 3 feet  
 < 3 feet  
 3 feet  
 5 feet  
 < 3 feet  
 3 feet

**Section R302.5.1** is hereby amended to read as follows:

**Section R302.5.1 Opening Protection.** Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings

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between the garage and residence shall be equipped with solid wood doors not less than 1 $\frac{3}{8}$  inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 $\frac{3}{8}$  inches (35 mm) thick, or 20-minute fire-rated doors, ~~equipped with a self-closing device.~~

**Section R303.4** is hereby deleted in its entirety.

**Section R307.1** is hereby amended to read as follows:

**Section R307.1 Space required.** Fixtures shall be spaced in accordance with ~~Figure R307.1, and in accordance with the requirements of Section P2705.1 the~~ North Dakota State Plumbing Code and Figure R307.1, with the exception of the clearance in front of water closets and bidets which shall be at least 24 inches.

**Section R309.3** is hereby deleted in its entirety.

**Section R310.2.2** is hereby amended to read as follows:

**Section R310.2.2 Window sill height.** Where a window is provided as the emergency escape and rescue opening, it shall have a sill height of not more than 44 inches (1118 mm) above the floor; where the sill height is below *grade*, it shall be provided with a window well in accordance with Section R310.2.3. Sill height shall be measured from the finished floor to the bottom of the clear opening.

**Exception:** Below *grade* emergency escape and rescue windows shall have a maximum sill height of 48 inches.

**Section R310.2.3.1** is hereby amended to read as follows:

**Section R310.2.3.1 Ladder and steps.** Window wells with a vertical depth greater than 44 inches (1118 mm) shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position, ~~or shall be equipped with a permanently-attached platform at least 30 inches by 16 inches.~~ The maximum distance between the top of the window well and a platform shall be 42 inches, and shall not impede the operation of the window. Ladders or steps required by this section shall not be required to comply with Sections R311.7. Ladders or rungs shall have an inside width of ~~not less than at least~~ 12 inches (305 mm), shall project not less than 3 inches (76 mm) from the wall and shall be spaced not more than 18 inches (457 mm) on center vertically for the full height

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of the window well.

**Exception:** Terraced window wells with a maximum of 24-inches per vertical rise and minimum of 12 inches per horizontal projection on each level shall also be allowed.

**Section R311.3** Exceptions are hereby amended to read as follows:

**Exceptions:**

1. Exterior balconies less than 60 square feet (5.6 m<sup>2</sup>) and only *accessed* from a door are permitted to have a landing less than 36 inches (914 mm) measured in the direction of travel.
2. A landing is not required on the outside of exterior doors other than the required egress door, where a stairway with a total rise of less than 30 inches (762 mm) is located on the exterior side of the door, provided the door does not swing over the stairway.

**Section R311.3.1** is hereby amended to read as follows:

**Section R311.3.1 Floor elevations at the required egress doors.** Landings or finished floors at the required egress door shall not be more than 1½ inches (38 mm) lower than the top of the threshold.

**Exception:** The landing or floor on the exterior side shall not be more than ~~7¾~~ 8 inches (~~196 mm~~) below the top of the threshold provided the door does not swing over the landing or floor.

\* \* \*

**Section R311.3.2** is hereby amended to read as follows:

**Section R311.3.2 Floor elevations for other exterior doors.** Doors other than the required egress door shall be provided with landings or floors not more than ~~7¾~~ 8 inches (~~196 mm~~) below the top of the threshold.

**Exception:** A ~~top~~ landing is not required where a stairway ~~of not more than two risers~~ with a total rise of less than 30 inches (762 mm) is located

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on the exterior side of the door, provided that the door does not swing over the stairway.

**Section R311.7.5.1** is hereby amended to read as follows:

**Section R311.7.5.1 Risers.** The riser height shall be not more than ~~7<sup>3</sup>/<sub>4</sub>~~ 8 inches (~~196 mm~~). . . .

**Section R311.7.5.2** is hereby amended to read as follows:

**Section R311.7.5.2 Treads.** The tread depth shall be not less than ~~10~~ 9 inches (~~254 mm~~). . . .

**Exception:** Where a landing is not provided or required by section R311.3, R311.3.2 or R311.7.6, the top tread of a stair serving exterior doors other than the required exit door, and in-swinging doors opening into an attached garage, shall be permitted to exceed the smallest tread by more than 3/8 inch (9.5mm). Such a tread shall be at least 18 inches (457mm) measured in the direction of travel.

**Section R311.7.5.2.1** is hereby amended to read as follows:

**Section R311.7.5.2.1 Winder treads.** Winder treads shall have a tread depth of not less than ~~10~~ 9 inches (~~254 mm~~) measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline. . . .

**Section R311.7.6** Exceptions are hereby amended to read as follows:

**Exceptions:**

1. A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs.
2. A landing is not required at the top of an exterior flight of stairs with a total rise of less than 30 inches, provided the door does not swing over the stairway.



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**Section R312.1.1** is hereby amended to read as follows:

**Section R312.1.1 Where Required.** *Guards* shall be provided for those portions of open-sided walking surfaces, ~~including~~ stairs, ramps and landings, that are located more than 30 inches (762mm) measured vertically to the floor or *grade* below, ~~at any point within 36 inches (914mm) horizontally to the edge of the open side.~~ Insect screening shall not be considered as a *guard*.

**Section R313.1** is hereby amended to read as follows:

**Section R313.1. Townhouse automatic fire sprinkler systems.** An automatic residential sprinkler system shall be installed in *townhouses*, where the townhouses are located on a private street or private fire department access road that is required to be greater than 150 feet in length as required by Section 503 of the International Fire Code.

**Section R313.1.1** is hereby amended to read as follows:

**Section R313.1.1 Design and installation.** Automatic residential fire sprinkler system for *townhouses* shall be designed and installed in accordance with ~~Section P2904~~ or NFPA 13D, NFPA 13R or NFPA 13.

**Section R313.2** is hereby deleted in its entirety.

**Section R314.3** is hereby amended to read as follows:

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

\* \* \*

5. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches (610 mm) or more, smoke detectors shall be installed in the hallway and in the adjacent room.

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**Section R322** is hereby deleted in its entirety.

**Section R326** is hereby deleted in its entirety.

**Section R401.1** is hereby amended to read as follows:

**Section R401.1 Application.** The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for buildings. In addition to the provisions of this chapter, the design and construction of foundations in flood hazard areas ~~as established by Table R301.2(4)~~ shall meet the provisions of Section R322 the Fargo Flood Proofing Code, Article 21-06 of the Fargo Municipal Code, and any other applicable requirements of the city of Fargo. Wood foundations shall be designed and installed in accordance with AWC PWF.

\* \* \*

**Section R401.3** is hereby amended to read as follows:

**Section R401.3 Drainage.** Surface drainage shall be diverted to a storm sewer conveyance or other *approved* point of collection ~~that does not create a hazard.~~ *Lots* shall be graded to drain surface water away from foundation walls. ~~The grade shall fall not fewer than a minimum of 6 inches (152mm) within the first 10 feet (3048mm).~~

~~**Exception:** Where *lot lines*, walls, slopes or other physical barriers prohibit 6 inches (152mm) of fall within 10 feet (3048mm), drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet (3048mm) of the building foundation shall be sloped not less than a minimum of 2 percent away from the building.~~

**Section R403.1.4.1** Exceptions are hereby amended to read as follows:

**Exceptions:**

1. Protection of free-standing *accessory structures* ~~with an area of 600 square feet (56 m<sup>2</sup>) or less~~, of light-frame construction, ~~with an eave height of 10 feet (3048 mm) or less~~ shall not be required.

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2. Protection of free-standing *accessory structures* with an area of 400 square feet ( $37 \text{ m}^2$ ) or less, of other than light-frame construction, ~~with an eave height of 10 feet (3048 mm) or less~~ shall not be required.
3. Decks ~~not supported by a dwelling~~ need not be provided with footings that extend below the frost line.

**Section R404.1.3.2** is hereby amended to read as follows:

**Section R404.1.3.2 Reinforcement for foundation walls.** Concrete foundation walls shall be laterally supported at the top and bottom. Horizontal reinforcement shall be provided in accordance with Table R404.1.2(1). Vertical reinforcement shall be provided in accordance with Table R404.1.2(2), R404.1.2(3), R404.1.2(4), R404.1.2(5), R404.1.2(6), R404.1.2(7), ~~or R404.1.2(8),~~ or Table R404.1.2(10) and Figure R404.1.2(1) or Table R404.1.2(11) and R404.1.2(2). . . .

**Table R404.1.2(10)** is hereby adopted as follows:

**Table R404.1.2(10)**  
**Foundation Wall Reinforcing**

Active Pressure = 45pcf

Minimum Reinforcement for Concrete Foundation Walls		
Wall Height (h) feet	Wall Thickness (t) inches	Vertical Reinforcing
8	8	#4 @ 24" o.c. #5 @ 40" o.c.
	10	#4 @ 30" o.c. #5 @ 50" o.c.
9	8	#4 @ 18" o.c. #5 @ 28" o.c.
	10	#4 @ 24" o.c. #5 @ 36" o.c.
10	10	#4 @ 16" o.c. #5 @ 26" o.c.

Notes:

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1. Chart is based on an active soil pressure of 45 pounds per cubic foot (pcf).
2. Reinforcing steel shall be ASTM A615 Fy – 60,000 pounds per square inch (psi).
3. The vertical reinforcing bars are to be located on the inside face.
4. Minimum concrete strength  $F_c^1 = 3,000$  pounds per square inch (psi).
5. Backfill shall not be placed until first floor framing and sheathing is installed and fastened or adequately braced and the concrete floor slab is in place or the wall is adequately braced.

**Table R404.1.2(11)** is hereby adopted as follows:

**Table R404.1.2(11)**  
**Foundation Wall Reinforcing**  
Active Pressure = 65 pcf

<b>Minimum Reinforcement for Concrete Foundation Walls</b>		
Wall Height (h) Feet	Wall Thickness (t) inches	Vertical Reinforcing
8	8	#4 @ 18" o.c. #5 @ 26" o.c. #6 @ 40" o.c.
	10	#4 @ 24" o.c. #5 @ 36" o.c. #6 @ 52" o.c.
9	8	#4 @ 12" o.c. #5 @ 18" o.c. #6 @ 26" o.c.
	10	#4 @ 16" o.c. #5 @ 24" o.c. #6 @ 36" o.c.
10	10	#4 @ 12" o.c. #5 @ 18" o.c. #6 @ 24" o.c.

Notes:

1. Chart is based on an active soil pressure of 65 pounds per cubic foot (pcf).
2. Reinforcing steel shall be ASTM A615 Fy – 60,000 pounds per square inch (psi).
3. The vertical reinforcing bars are to be located on the inside face.
4. Minimum concrete strength  $F_c^1 = 3,000$  pounds per square inch (psi).

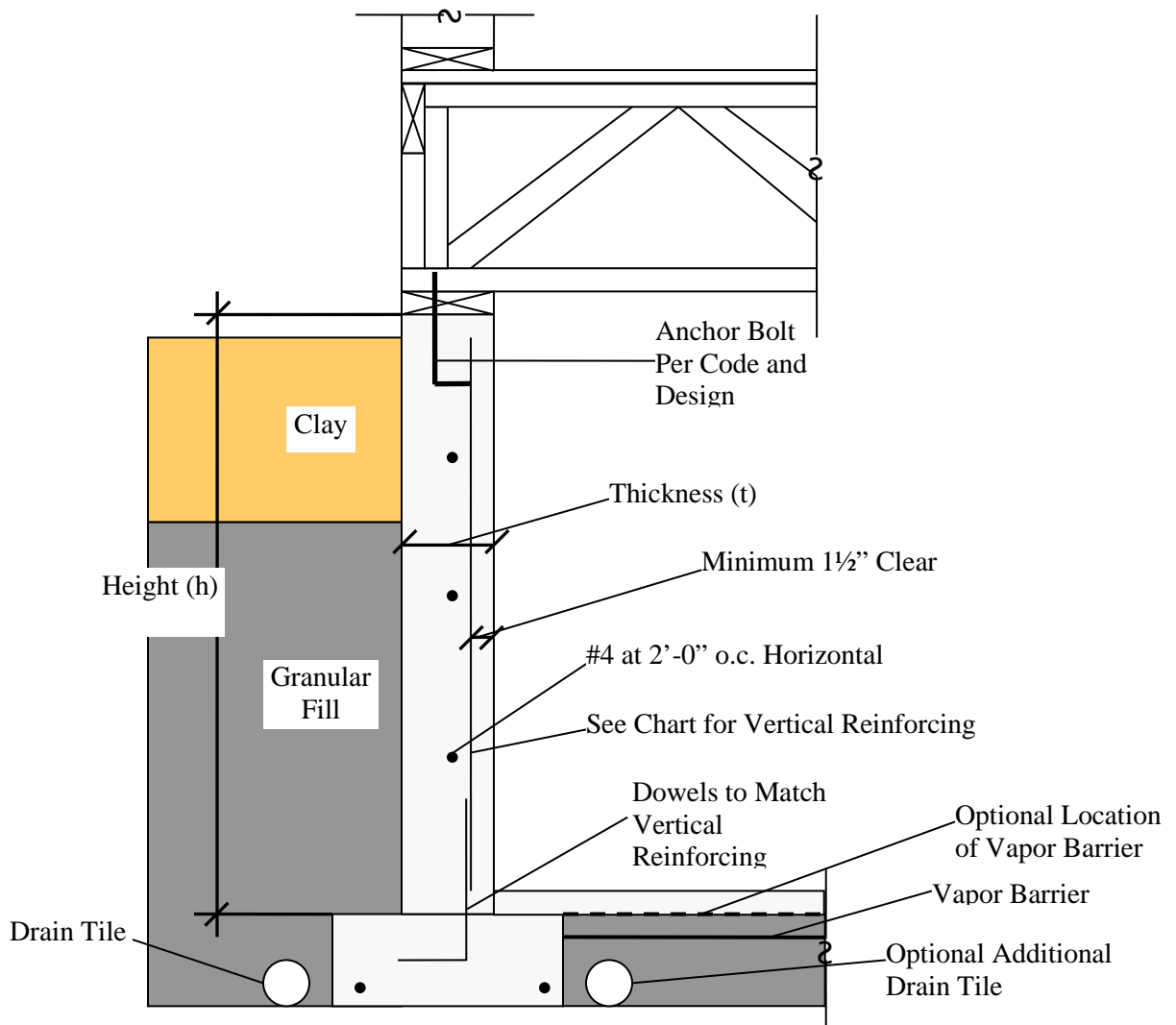
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5. Backfill shall not be placed until first floor framing and sheathing is installed and fastened or adequately braced and the concrete floor slab is in place or the wall is adequately braced.

Figures R404.1.2(1) and R404.1.2(2) are adopted as shown:

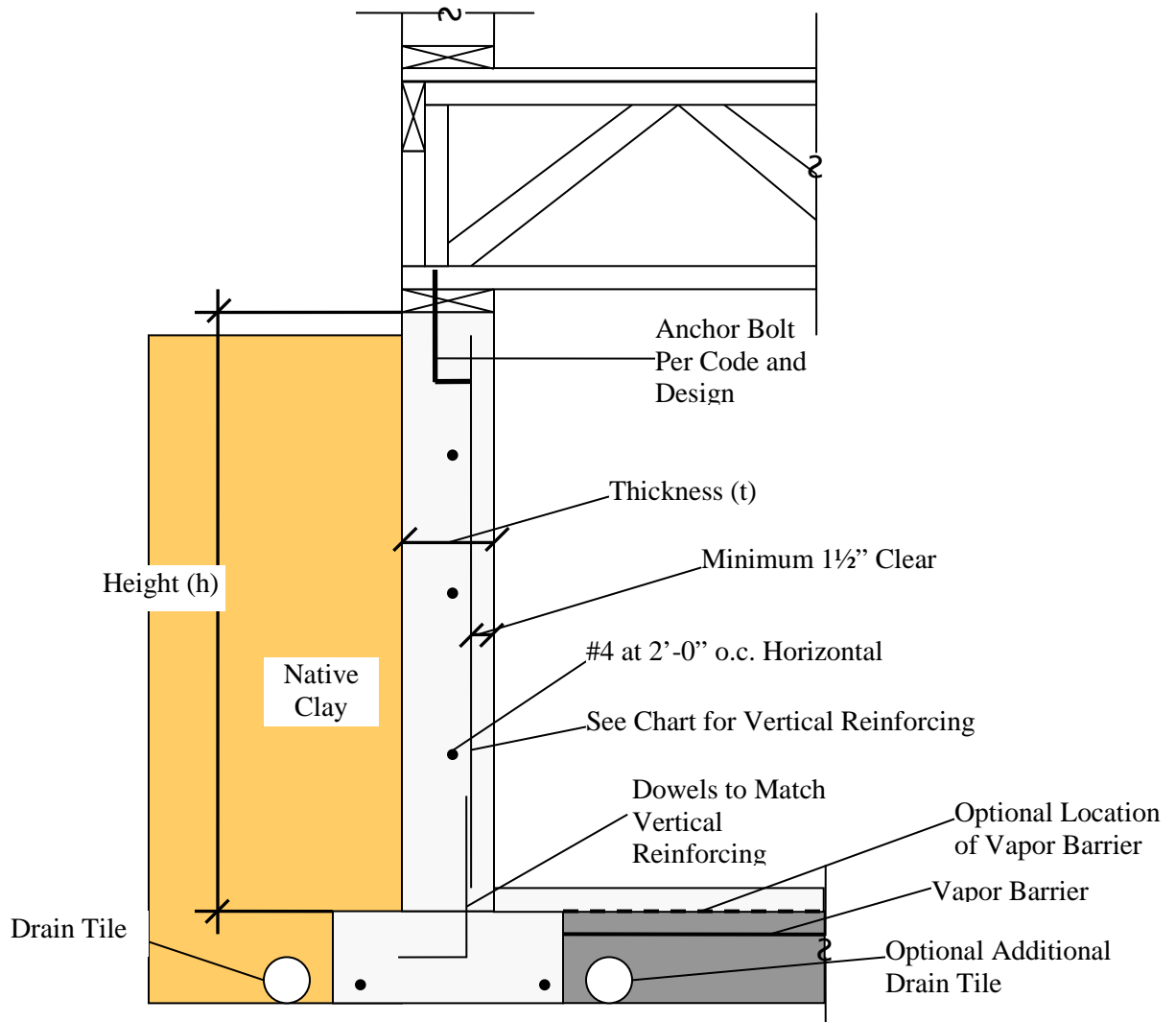
**FIGURE R404.1.2(1)**



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**FIGURE R404.1.2(2)**



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**Section R507.3** is hereby deleted in its entirety.

**Table R507.3.1** is hereby deleted in its entirety.

**Section R507.5** is hereby amended to read as follows:

**Section R507.5 Deck Beams.** Maximum allowable spans for wood deck beams, as shown in Figure R507.5, shall be in accordance with Table R507.5. Beam plies shall be fastened with two rows of 10d (3-inch x 0.128-inch) nails minimum at 16 inches (406 mm) on center along each edge. Beams shall be permitted to cantilever at each end up to one-fourth of the ~~allowable~~ actual beam span. Deck beams of other materials shall be permitted where designed in accordance with accepted engineering practices.

**Section R602.7.2** is hereby amended to read as follows:

**Section R602.7.2 Rim board headers.** Rim board header size, material and span shall be in accordance with Table R602.7(1). Rim board headers shall be constructed in accordance with Figure R602.7.2 and shall be supported at each end by full-height studs. ~~The number of full height studs shall be not less than the number of studs displaced by half of the header span based on the maximum stud spacing in accordance with Table R302.3(5).~~ Rim board headers supporting concentrated loads shall be designed in accordance with accepted engineering practice.

**Section R602.7.5** is hereby amended to read as follows:

**Section R602.7.5 Support for headers.** Headers shall be supported on each end with one or more jack studs or with approved framing anchors in accordance with Table R602.7(1) or R602.7(2). The full-height stud adjacent to each end of the header shall be end nailed to each end of the header with four-16d nails (3.5 inches x .0135 inches). ~~The minimum number of full height studs at each end of a header shall be in accordance with Table R602.7.5.~~

**Table 602.7.5** is hereby deleted in its entirety.

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**Table N1102.1.2 (R402.1.2)** is hereby amended to read as follows:

Insulation and Fenestration Requirements By Component				
Climate Zone	###	Wood Frame Wall R-Value	###	Basement <sup>c</sup> Wall R-Value
6	###	<del>20 + 5<sup>h</sup></del> or <del>13 + 10<sup>h</sup></del> <u>21 or 13 + 5h,i</u>	###	<del>15/19</del> <u>10/13</u>
7 and 8	###	<del>20 + 5<sup>h</sup></del> or <del>13 + 10<sup>h</sup></del> <u>21 or 13 + 5h,i</u>	###	<del>15/19</del> <u>10/13</u>

(Balance of Table remains the same.)

**Table N1102.1.4 (R402.1.4)** is hereby amended to read as follows:

Equivalent U-Factors				
Climate Zone	###	Frame Wall U-Factor	###	Basement Wall U-Factor
6	###	<del>0.045</del> <u>0.057</u>	###	<del>0.050</del> <u>0.059</u>
7 and 8	###	<del>0.045</del> <u>0.057</u>	###	<del>0.050</del> <u>0.059</u>

(Balance of Table remains the same.)

**Section N1102.4 (R402.4)** is hereby amended to read as follows:

**Section N1102.4 (R402.4) Air leakage (Mandatory).** The *building thermal envelope* shall be constructed to limit air leakage in accordance with the requirements of Sections N1102.4.1 through N1102.4.5.

**Exception:** Dwelling units of R-2 Occupancies and multiple single family dwellings shall be permitted to comply with IECC Section C402.5.U.



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**Section N1102.4.1.3 (R402.4.1.3)** is hereby adopted to read as follows:

**Section N1102.4.1.3 Visual Inspection Option.** *Building thermal envelope* tightness and insulation shall be considered acceptable when installed in accordance with Table N1102.4.1.1 (R402.4.1.1) - “Air Barrier and Insulation” and has been field verified.

**Section N1103.3.5 (R403.3.5)** is hereby amended to read as follows:

**Section 1103.3.5 Building Cavities (Mandatory).** *Building* framing cavities shall not be used as supply ducts, ~~and plenums~~.

**Section N1103.6 (R403.6)** is hereby amended to read as follows:

**Section 1103.6 Mechanical Ventilation (Mandatory).** (balance unchanged)

**Table N1105.5.2(1) [R405.5.2(1)]** is hereby amended to read as follows:

Building Component	Standard Reference Design	Proposed Design
Air exchange rate	The air leakage rate at a pressure of 0.2 inch w.g. (50 Pa) shall be  <i>Climate Zones 1 and 2: 5 air changes per hour</i> <i>Climate Zones 3 through 8: 3 air changes per hour</i>  * * *	* * *

(Balance of table is unchanged.)

**Section M1301.1.1** is hereby deleted in its entirety.

**Section M1401.5** is hereby deleted in its entirety.

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**Section M1502.4.2** is hereby amended to read as follows:

**Section M1502.4.2 Duct Installation.** Exhaust ducts shall be supported at intervals not to exceed ~~424~~ feet (~~3658 mm~~) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints ~~shall be sealed in accordance with Section M1601.4.1 and shall~~ may be mechanically fastened. Ducts shall not be joined with screws, ~~or similar fasteners that protrude more than 1/8 inch (3.2 mm) into the inside of the duct.~~ Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

**Section M1503.6** is hereby amended to read as follows:

**Section M1503.6 Makeup air required.** Where one or more gas, liquid or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19m<sup>3</sup>/S) shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust air rate in excess of 400 cfm. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2.

**Section M1503.6 Exception** is hereby deleted in its entirety.

**Section M1601.4.1** Exceptions are hereby amended to read as follows:

**Exceptions:**

\* \* \*

3. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams. ~~This exception shall not apply to snap lock and button lock type joints and seams that are located outside of conditioned spaces.~~

**Section M1601.4.10** is hereby deleted in its entirety.

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**Section M1701.2** is hereby deleted in its entirety.

**Section M2001.4** is hereby deleted in its entirety.

**Section M2005.1** is hereby amended to read as follows:

**Section M2005.1 General.** Water heaters shall be installed in accordance with ~~Chapter 28~~ the North Dakota State Plumbing Code, the manufacturer's instructions and the requirements of this code. . . .

**Section M2101.3** is hereby amended to read as follows:

**Section M2101.3 Protection of potable water.** The potable water system shall be protected from backflow in accordance with the provisions listed in ~~Section P2902~~ the North Dakota State Plumbing Code.

**Section M2101.10** is hereby amended to read as follows:

**Section M2101.10 Tests.** New ~~H~~hydronic piping systems shall be isolated and tested hydrostatically at a pressure of ~~one and one half times the maximum system design pressure, but~~ not less than 100-pounds per square inch (689 kPa). The duration of each test shall be not less than 15 minutes.

**Section M2103.3** is hereby amended to read as follows:

**Section M2103.3 Piping joints.**

\* \* \*

2. Copper tubing shall be joined by brazing complying with ~~Section P3003.6.1~~ the North Dakota State Plumbing Code.

\* \* \*

**Section M2201.6** is hereby deleted in its entirety.

**Section G2404.7** is hereby deleted in its entirety.

**Figure G2407.6.1(1) [304.6.1(1)]** is hereby deleted in its entirety.

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**Figure G2407.6.1(2) [304.6.1(2)]** is hereby deleted in its entirety.

**Section G2407.11 (304.11)** is hereby amended to read as follows:

**Section G2407.11 (304.11) Combustion air ducts.** *Combustion air* ducts shall comply with all the following:

\* \* \*

5. Ducts shall not ~~be screened where terminating~~ terminate in an attic space.

\* \* \*

**Section G2413.6 (402.6)** is hereby amended to read as follows:

**Section G2413.6 (402.6) Allowable pressure drop.** The design pressure loss in any *pipng system* under maximum probable flow conditions, from the *point of delivery* to the inlet connection of the *appliance*, shall be such that the supply pressure at the *appliance* is greater than or equal to the minimum pressure required by the *appliance*, but such pressure loss shall not be greater than 0.5 inch water column for gas pipe systems operating at less than 2 psi.

**Section G2417.4.1 (406.4.1)** is hereby amended to read as follows:

**Section G2417.4.1 (406.4.1) Test pressure.** The test pressure to be used shall not be less than 1 ½ times the proposed maximum working pressure, but not less than 3 25 psig (20 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the *pipng* greater than 50 percent of the specified minimum yield strength of the pipe.

**Section G2425.12 (501.12)** is hereby amended to read as follows:

**Section 2425.12 (501.12) Residential and low-heat appliances flue lining systems.** *Flue lining* systems for use with residential-type and low-heat *appliances* shall be limited to the following:

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1. Clay *flue lining* complying with the requirements of ASTM C315 or equivalent when each *appliance* connected into the masonry chimney has a minimum input rating greater than 400,000 Btu/h. Clay *flue lining* shall be installed in accordance with Chapter 10.

\* \* \*

3. Other *approved* materials that will resist, without cracking, softening, or corrosion, *flue gases* and *condensate* at temperatures up to 1800°F (982°C).

a. Aluminum (1100 or 3003 alloy or equivalent) not less than 0.032 inches thick up to 8 inches in diameter.

b. Stainless steel (304 or 430 alloy or equivalent) not less than 26 gauge (0.018 inches thick) to 8 inches in diameter or not less than 24 gauge (0.024 inches thick) 8 inches in diameter and larger.

When a metal liner is used other than a listed chimney liner a condensation drip tee shall be installed and supported in an *approved* manner.

**Section G2427.5.2 (503.5.3)** is hereby amended to read as follows:

**Section G2427.5.2 (503.5.3) Masonry chimneys.** Masonry *chimneys* shall be built and installed in accordance with NFPA 211 and shall be lined ~~with an *approved clay flue lining*, a listed *chimney lining system* listed and labeled in accordance with UL 1777 or other *approved* material that will resist corrosion, erosion, softening or cracking from vent gases at temperatures up to 1,800°F (982°C)~~ as indicated in Section G2425.12.

**Section G2439.7.2 (614.8.2)** is hereby amended to read as follows:

**Section G2439.7.2 (614.8.2) Duct Installation.** Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws, ~~or similar fasteners that protrude more than 1/8 inch (3.2 mm) into the inside of the duct.~~ Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

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**Section G2442.4 (618.4)** is hereby amended to read as follows:

**Section G2442.4 (618.4) Screen.** Required outdoor air inlets shall be covered with a screen having ¼ -inch (6.4 mm) openings. Required outdoor air inlets serving a nonresidential portion of a building shall be covered with screen having openings larger than ¼ inch (6.4 mm) and not larger than ½ inch.

**Section G2445 (618.5)** is hereby deleted in its entirety.

**Chapters 25 through 43** are hereby deleted in their entirety.

Section 3. Penalty.

A person who willfully violates this ordinance is guilty of an infraction. Every person, firm or corporation violating an ordinance which is punishable as an infraction shall be punished by a fine not to exceed \$1,000.00; the court to have power to suspend said sentence and to revoke the suspension thereof.

Section 4. Effective Date.

This ordinance shall be in full force and effect from and after its passage, approval and publication.

(SEAL)

Attest:

/s/  
Steven Sprague, City Auditor

/s/  
Timothy J. Mahoney, M.D., Mayor

First Reading:	7-29-19
Second Reading:	8-12-19
Final Passage:	8-12-19
Publication:	8-26-19