

OFFICE OF THE CITY ATTORNEY
FARGO, NORTH DAKOTA

ORDINANCE NO. 4746

AN ORDINANCE AMENDING ARTICLE 21.1-01 OF CHAPTER 21.1
OF THE FARGO MUNICIPAL CODE RELATING TO
THE INTERNATIONAL RESIDENTIAL CODE

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

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

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

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

13 NOW, THEREFORE,

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

15 Section 1. Amendment.

16 Article 21.1-01 of Chapter 21.1 of the Fargo Municipal Code is hereby
17 amended to read as follows:

18 CHAPTER 21.1

19 INTERNATIONAL RESIDENTIAL CODE

20 Article
21 21.1-01 International Residential Code--Adoption--Amendments, §§ 21.1-
22 0101 to 21.1-0102

23 ARTICLE 21.1-01

Section

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- 21.1-0101 Adoption of International Residential Code by Reference
21.1-0102 Amendment to International Residential Code

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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 Conference of Building
Officials~~ International Code Council, being particularly the ~~2006~~ 2009 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 jurisdiction
of the city.

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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:

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Section R101.1 --Titles. 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."

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

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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 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. Any suit 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 representative of the jurisdiction~~

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1 until the final termination of the proceedings. The building official
2 or any subordinate shall not be liable for cost in any action, suit or
3 proceeding that is instituted in pursuance of the provisions of this
4 code.

5 This code shall not be construed to relieve from or lessen the
6 responsibility of any person owning, operating, or controlling any
7 building or structure for any damages to persons or property
8 caused by defects, nor shall the code enforcement agency or the
9 city be held as assuming any such liability by reason of the
10 inspection authorized by this code or any permits or certificates
11 issued under this code.

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

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

14 **R105.2** Work exempt from permit. Permits shall not be required
15 for the following. Exemption from permit requirements of this
16 code shall not be deemed to grant authorization for any work to be
17 done in any manner in violation of the provisions of this code or
18 any other laws or ordinances of this jurisdiction.

19 **Building:**

- 20 1. One-story detached accessory structures used as tool and
21 storage sheds, playhouses and similar uses, provided the
22 floor area does not exceed 200 120 square feet (185.8 m).
23 2. Fences not over 6 8.5 feet (1829 mm) high.

7. Prefabricated Swimming pools that are less than 24 inches
(610 mm) deep.
8. Swings and other playground equipment accessory to a one
or two family dwelling.
9. Window awnings supported by an exterior wall which do
not project more than 54 inches (1372 mm) from the
exterior wall and do not require additional support.

Section R106.1.3 is hereby deleted in its entirety.

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

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 R112.2.1 is hereby deleted in its entirety.

Section R112.2.2 is hereby deleted in its entirety.

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 to them as in other code publications of the International Code Council. Wherever the term ‘International Plumbing Code’ and/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 together with the North Dakota State Wiring Standards. Wherever reference is made to flood plain requirements, it shall mean the Fargo Flood Plain Management Ordinance together with the Fargo Flood Proofing Code (Fargo Municipal Code Article 21-06).

Section R301.2.4 is hereby deleted in its entirety.

Table 302.1 third and fourth columns are hereby amended as follows:

Reference to section R317.3 is changed to Section R302.4 and entries in column four are changed as follows:

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<3 feet
5 > 3 feet
4 > 2 feet
5 > 3 feet
< 3 feet
3 feet
5 feet
< 5 feet
5 feet

** Add footnote behind (walls 1) – A common 2-hour fire-resistance-rated wall is permitted for two or more family dwellings where the common wall is on a property line provided such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. Electrical installations shall be installed in accordance with chapters 33 through 42. Penetrations of electrical outlet boxes shall be in accordance with section 302.4

Section 302.2 is hereby amended to read as follows:

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

Exception: A common 1 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

Section 307.1 is hereby amended to read as follows:

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1 **Section 307.1** Space required. Fixtures shall be spaced in
2 accordance with ~~Figure R307.1~~, and in accordance with the
3 requirements of Section P2705.1 as per Figure R307.1, with the
4 exception of the clearance in front of water closets and bidets
5 which shall be at least 24 inches.

6 **Section R310.1** is hereby amended to read as follows:

7 Section R310.1 – Emergency escape and rescue required.
8 Basements and every sleeping room shall have at least one
9 operable emergency and rescue opening. Such opening shall open
10 directly into a public street, public alley, yard or court. Where
11 basements contain one or more sleeping rooms, emergency egress
12 and rescue openings shall be required in each sleeping room, but
13 shall not be required in adjoining areas of the basement. Where
14 emergency escape and rescue openings are provided they shall
15 have a sill height of not more than 44 inches (1118 mm) above the
16 floor. Where a door opening having a threshold below the adjacent
17 ground elevation serves as an emergency escape and rescue
18 opening and is provided with a bulkhead enclosure, the bulkhead
19 enclosure shall comply with Section 310.3. The net clear opening
20 dimensions required by this section shall be obtained by the normal
21 operation of the emergency escape and rescue opening from the
22 inside. Emergency escape and rescue openings with a finished sill
23 height below the adjacent ground elevation shall be provided with
a window well in accordance with Section R310.2.

Exceptions:

1. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m²)
2. Below grade emergency escape and rescue windows may have a maximum sill height of 48 inches.

Section R310.2.1 is hereby amended to read as follows:

Section R310.2.1 -- 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

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1 in the fully open position or shall be equipped with a permanently-
2 attached platform, of a minimum area of 30"x16", in the window
3 well that will reduce the vertical depth of the window well to no
4 more than 42" below the top of the window well and that will not
5 impede the operation of the window. Ladders or steps required by
6 this section shall not be required to comply with Sections R311.5
7 and R311.6. Ladders or rungs shall have a inside width of at least
8 12 inches (305 mm), shall project at least 3 inches (76 mm) from
9 the wall and shall be spaced not more than 18 inches (457 mm) on
10 center vertically for the full height of the window well.

11 Exception: Terraced window wells with a maximum of 24" per
12 vertical rise and minimum of 12" horizontal projections on each
13 level shall also be allowed in accordance with Figures 310.2.1(1)
14 and 310.2.1(2).

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

16 **Section R311.3.2 Floor elevations for other exterior doors.**
17 Doors other than the required egress door shall be provided with
18 landings or floors not more than $7\frac{3}{4}$ 8 inches (196 mm) (203 mm)
19 below the top of the threshold.

20 **Exception:** A landing is not required where a stairway of
21 two or fewer risers with a total rise of less than 30 inches
22 (762 mm) is located on the exterior side of the door,
23 provided the door does not swing over the stairway.

Section R311.7.4.1 is hereby amended to read as follows:

Section R311.7.4.1 -- Riser height. The maximum riser height
shall be $7\frac{3}{4}$ 8 inches (196 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).

Section R311.7.4.2 is hereby amended to read as follows:

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1 **R311.7.4.2 Tread depth.** The minimum tread depth shall be ~~10~~ 9
2 inches (~~254 mm~~). The tread depth shall be measured horizontally
3 between the vertical planes of the foremost projection of adjacent
4 treads and at a right angle to the tread's leading edge. The greatest
5 tread depth within any flight of stairs shall not exceed the smallest
6 by more than 3/8 inch (9.5 mm). Consistently shaped winders at
7 the walkline shall be allowed within the same flight of stairs as
8 rectangular treads and do not have to be within 3/8 inch (9.5 mm)
9 of the rectangular tread depth.

10 Exception:

- 11 1. Where a landing is not provided or required by
12 section 311.3.2 or 311.7.5, the top tread of a stair
13 serving exterior doors other than the required exit
14 door, and in-swinging doors opening into an
15 attached garage, shall be permitted to exceed the
16 smallest tread by more than 3/8 inch (9.5mm). Such
17 a tread shall be at least 18 inches (457mm)
18 measured in the direction of travel.

19 Winder treads shall have a minimum tread depth of ~~10~~ 9 inches
20 (~~254 mm~~) measured between the vertical planes of the foremost
21 projection of adjacent treads at the intersections with the walkline.
22 Winder treads shall have a minimum tread depth of 6 inches (152
23 mm) at any point within the clear width of the stair. Within any
24 flight of stairs, the largest winder tread depth at the walkline shall
25 not exceed the smallest winder tread by more than 3/8 inch (9.5
26 mm).

27 Section 311.7.5 is hereby amended to read as follows:

28 **Section R311.7.5 Landings for stairways.** There shall be a floor
29 or landing at the top and bottom of each stairway.

30 **Exceptions:**

- 31 1. A floor or landing is not required at the top of an interior
32 flight of stairs, including stairs in an enclosed garage,
33 provided a door does not swing over the stairs. ~~A flight of~~
34 ~~stairs shall not have a vertical rise larger than 12 feet (3658~~

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~~mm) between floor levels or landings. The width of each landing shall not be less than the width of the stairway served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.~~

2. A landing is not required 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.

A flight of stairs shall not have a vertical rise larger than 12 feet (3658 mm) between floor levels or landings. The width of each landing shall not be less than the width of the stairway served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel.

Section 312.1 is hereby amended to read as follows:

Section R312.1 Where Required. Guards shall be located along 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 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:

3. On each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level. In dwelling units

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

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

6 **Section R401.1 Application**

7 The provisions of this chapter shall control the design and
8 construction of the foundation and foundation spaces for all
9 buildings. In addition to the provisions of this chapter, the design
10 and construction of foundations in areas prone to flooding as
11 established by ~~Table R301.2(1)~~ shall meet the provisions of
12 ~~Section R324~~ the Fargo Flood Proofing Code (Article 21-06) and
13 any other applicable requirements of the city of Fargo. Wood
14 foundations shall be designed and installed in accordance with
15 AF&PA PWF.

16 ***

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

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

23 ~~Exception: Where lot lines, walls, slopes or other physical~~
~~barriers prohibit 6 inches (152mm) of fall within 10 feet~~
~~(3048mm), the final grade shall slope away from the foundation at~~
~~a minimum slope of 5 percent and the water shall be directed to~~
~~drains or swales to ensure drainage away from the structure.~~
~~Swales shall be sloped a minimum of 2 percent when located~~
~~within 10 feet (3048mm) of the building foundation. Impervious~~
~~surfaces within 10 feet (3048mm) of the building foundation shall~~
~~be sloped a minimum of 2 percent away from the building.~~

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Section R403.1.4.1, Exceptions 1, 2 and 3, are hereby amended to read as follows:

Section R403.1.4.1 -- Frost protection

Exceptions: 1. Protection of freestanding accessory structures with an area of 600 square feet (37 m^2) or less of light framed construction and an eave height of 10 feet (3048 mm) or less shall not be required.

2. Protection of freestanding, accessory structures with an area of 400 square feet (37 m^2) or less, of other than light-framed 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.

Table R404.1.2(10), referred to in Section 404.1.2, is added 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.

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		#5 @ 26" o.c.
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Notes:

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), referred to in Section 404.1.2, is added as follows:

Table R404.1.2(11)
Foundation Wall Reinforcing

Active Pressure = 65 pcf

Minimum Reinforcement for Concrete Foundation Walls		
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.

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		#6 @ 24" o.c.
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Notes:

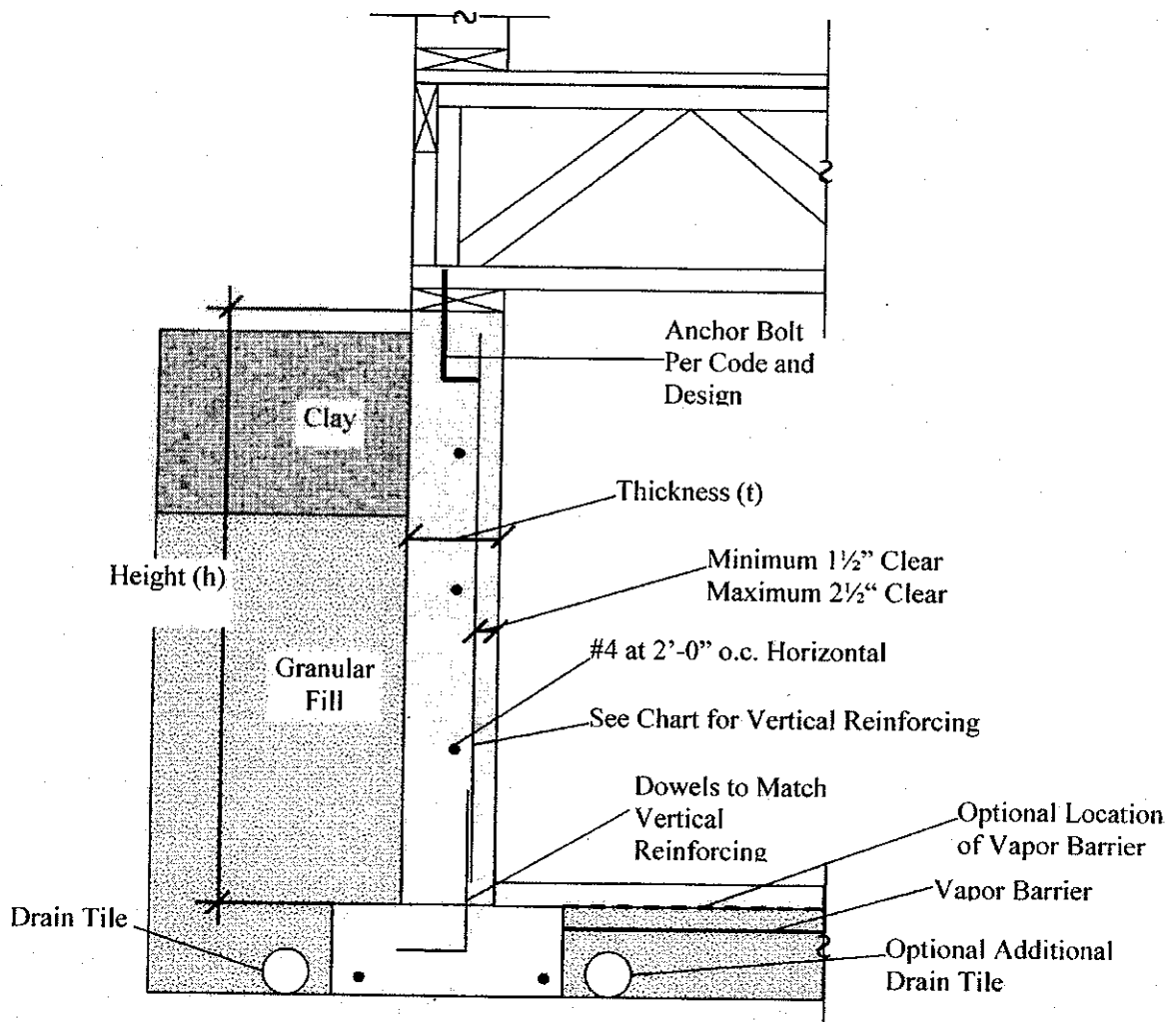
1. Chart is based on an active soil pressure of 65 pounds per cubic foot (pcf).
2. Reinforcing steel shall be ASTM A615 Fy – 60,000 pounds per square inch (psi).
3. The vertical reinforcing bars are to be located on the inside face.
4. Minimum concrete strength $F_c^1 = 3,000$ pounds per square inch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

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FIGURE R404.1.2(1), referred to in Section 404.1.2

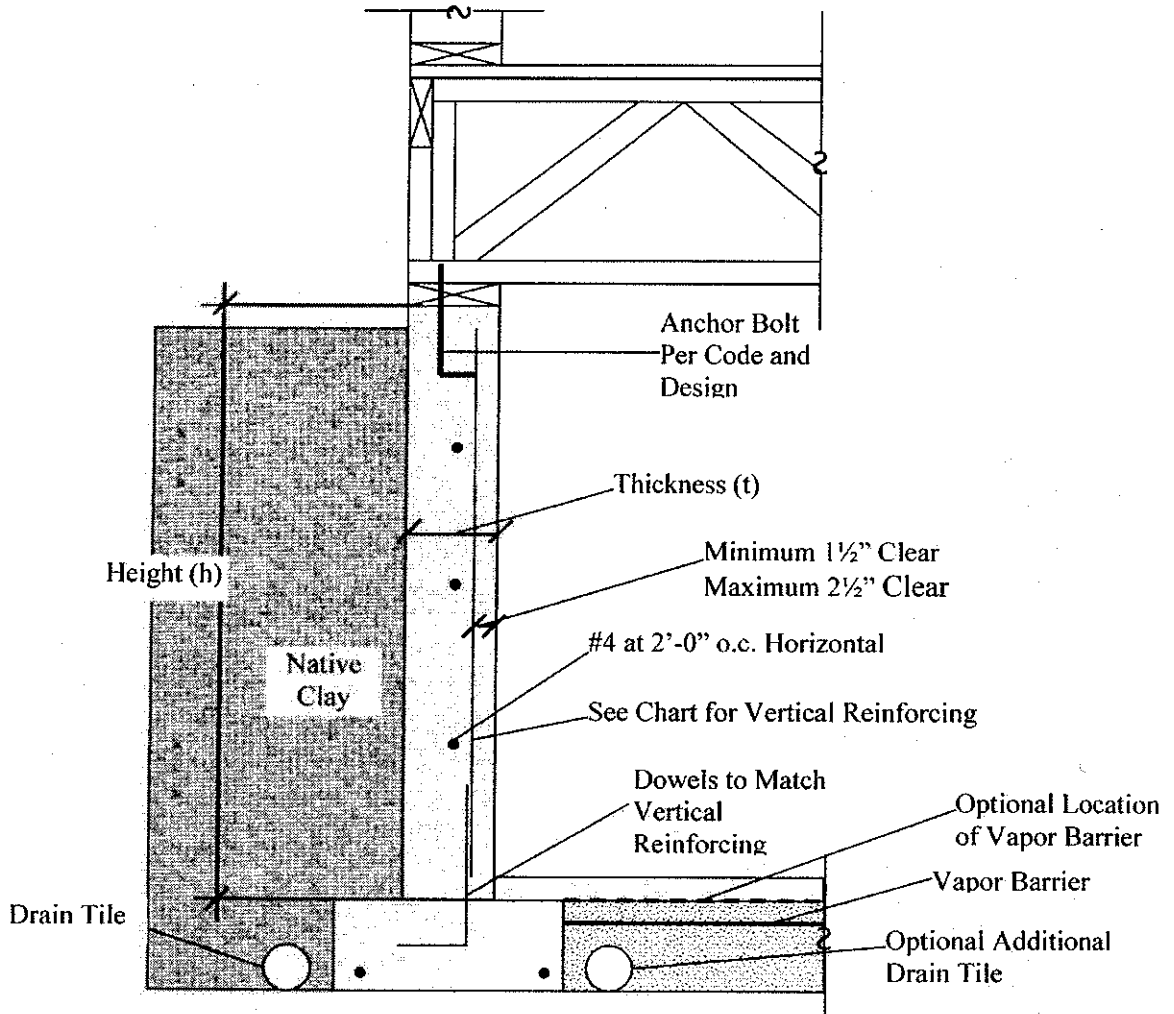


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FIGURE R404.1.2(2) referred to in Section 404.1.2



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6 **Section R404.1.2.2** is hereby amended to read as follows:

7 **R404.1.2.2 Reinforcement for foundation walls.** Concrete
8 foundation walls shall be laterally supported at the top and bottom.
9 Horizontal reinforcement shall be provided in accordance with
10 Table R404.1.2(1). Vertical reinforcement shall be provided in
11 accordance with Table R404.1.2(2), R404.1.2(3), R404.1.2(4),
12 R404.1.2(5), R404.1.2(6), R404.1.2(7), or R404.1.2(8),
13 R404.1.2(10) or R404.1.2(11). Vertical reinforcement for flat
14 *basement* walls retaining 4 feet (1219 mm) or more of unbalanced
15 backfill is permitted to be determined in accordance with Table
16 R404.1.2(9) and Figures 404.1.2(1) and 404.1.2(2). For *basement*
17 walls supporting above-grade concrete walls, vertical
18 reinforcement shall be by Tables R404.1.2(2) through R404.1.2(8)
19 or by Section R611.6 for the above-grade wall. In buildings
20 assigned to Seismic Design Category D0, D1 or D2, concrete
21 foundation walls shall also comply with Section R404.1.4.2.
22

23 **Section R405.2.3** is hereby amended to read as follows:

Section R405.2.3 - Drainage system

In other than Group I soils, a sump shall be provided to drain the porous layer and footings. The sump shall be at least 24 inches (610 mm) 18 inches in diameter or 20 inches square (0.0129m²) 16 inches square, shall extend at least 24 inches (610 mm) below the bottom of the basement floor and shall be capable of positive gravity or mechanical drainage to remove any accumulated water. The drainage system shall discharge into an approved sewer system or to daylight.

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1 **Section R506.2.3** is hereby amended to add an exception 5 to read as
2 follows:

3 Exceptions:

4 ***

5 5. For attached garages.

6 **Section R602.10** is hereby amended to read as follows:

7 **Section R602.10 Wall bracing.** Buildings shall be braced in
8 accordance with this section. Where a building, or portion thereof,
9 does not comply with one or more of the bracing requirements in
10 this section, those portions shall be designed and constructed in
11 accordance with Section R301.1.

12 **Exceptions:**

- 13 1. Detached one- and two-family *dwelling*s located in Seismic Design
14 Category C are exempt from the seismic bracing requirements of this
15 section. Wind speed provisions for bracing shall be applicable to
16 detached one- and two-family *dwelling*s.
17 2. The wall bracing requirements of section R602.10 of the 2006
18 International Residential Code may be used as an alternative to this
19 section.

20 **Section R703.6.2** is hereby amended to read as follows:

21 **Section R703.6.2 – Plaster.** Plastering with portland cement
22 plaster shall be not less than three coats when applied over metal
23 lath or wire lath and shall be not less than two coats when applied
 over masonry, concrete, pressure-preservative treated wood or
 decay-resistant wood as specified in Section R319.1 or gypsum
 backing. If the plaster surface is completely covered by veneer or
 other facing material or is completely concealed, plaster
 application need be only two coats, provided the total thickness is
 as set forth in Table R702.1(1). Approved decorative coatings
 applied to a concrete or masonry surface shall be installed in
 accordance with the manufacturer's installation instructions.

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1 **Section R903.5 and Figure R903.5** are hereby deleted in their entirety.

2 **Section R905.2.5** is hereby amended to read as follows:

3 Fasteners for asphalt shingles shall be galvanized steel, stainless
4 steel, aluminum or copper roofing nails, minimum 12 gage [0.105
5 inch (2.67 mm)] shank with a minimum 3/8 inch (9.5 mm)
6 diameter head, ASTM F 1667, of a length to penetrate through the
7 roofing materials and a minimum of 3/4 inch (19.1 mm) into the
8 roof sheathing or other fasteners as approved by the building
official and shingle manufacturer. Where the roof sheathing is less
than 3/4 inch (19.1 mm) thick, the fasteners shall penetrate through
the sheathing. Fasteners shall comply with ASTM F 1667.

9 **Section R907** is hereby deleted in its entirety and relocated to the
Appendices as Appendix R.

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

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

12 **Section M1411.6** is hereby deleted in its entirety.

13 **Section M1502.4.4.1** is hereby amended read as follows:

14 **Section M1502.4.4.1. Specified Length.** The maximum length of
15 the exhaust duct shall be ~~25 (7620 mm)~~ 35 (10668 mm) feet from
16 the connection to the transition duct from the dryer to the outlet
17 terminal. Where fittings are used, the maximum length of the
18 exhaust duct shall be reduced in accordance with Table
M1502.4.4.1.

19 **Section M1601.4.9** is hereby deleted in its entirety.

20 **Section M1603** is amended to read :

21 M1603.1 General. The minimum unobstructed total area of
22 supply and return air ducts from a warm-air furnace shall be in

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1 accordance with the manufacturer's installation instructions, but
2 shall not be less than 2 square inches (1290 mm sq) for each 1,000
3 Btu/h (293W) output rating of the furnace. The minimum
4 unobstructed total area of the supply and return air ducts from a
5 central air-conditioning unit and/or heat pump shall be in
6 accordance with the manufacturer's installation instructions, but
7 shall be not less than 6 square inches (3870 mm sq) for each 1,000
8 Btu/h (293W) nominal cooling output rating. Dampers, grilles, or
9 registers installed for the purpose of controlling the supply airflow
10 shall not be considered as obstructions.

6 **Section M1701.2.1** is hereby added to read as follows.

7 Section M1701.2.1 Attic spaces shall not be used as a source of
8 combustion air.

9 **Section M1801.1** is hereby amended to read as follows:

10 Section M1801.1 -- Venting required. Fuel-burning appliances
11 shall be vented to the outside in accordance with their listing and
12 label and manufacturer's installation instructions ~~except appliances~~
13 ~~listed and labeled for unvented use.~~ Venting systems shall consist
14 of approved chimneys or vents, or venting assemblies that are
15 integral parts of labeled appliances. Gas-fired appliances shall be
16 vented in accordance with Chapter 24.

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

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

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

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

21 Section M2101.10 -- Tests. New Hydronic piping shall be
22 isolated and tested hydrostatically at a pressure of not less than
23

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100-pounds per square inch (psi) (689 kPa) for a duration of not less than 15 minutes.

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

2
3 **Section G2404.7** is hereby deleted in its entirety.

4 **Section G2406.2** is hereby amended to read as follows:

5 **Section G2406.2 (303.3) Prohibited locations.** *Appliances* shall
6 not be located in sleeping rooms, bathrooms, toilet rooms, storage
7 closets or surgical rooms, or in a space that opens only into such
8 rooms or spaces, except where the installation complies with one
9 of the following:

10 1. The *appliance* is a direct-vent *appliance* installed in accordance
11 with the conditions of the listing and the manufacturer's instructions.

12 2. *Vented room heaters, wall furnaces, vented decorative appliances,*
13 *vented gas fireplaces, vented gas fireplace heaters and decorative*
14 *appliances* for installation in vented solid fuel-burning *fireplaces* are
15 installed in rooms that meet the required volume criteria of Section
16 G2407.5.

17 3. ~~A single wall-mounted unvented room heater is installed in~~
18 ~~a bathroom and such unvented room heater is equipped as~~
19 ~~specified in Section G2445.6 and has an input rating not greater~~
20 ~~than 6000 Btu/h (1.76kW). The bathroom shall meet the required~~
21 ~~volume criteria of Section G2407.5.~~

22 4. ~~A single wall-mounted unvented room heater is installed in~~
23 ~~a bedroom and such unvented room heater is equipped as specified~~
~~in Section G2445.6 and has an input rating not greater than 10,000~~
~~Btu/h (2.93kW). The bedroom shall meet the required volume~~
~~criteria of Section G2407.5.~~

§ 3. The *appliance* is installed in a room or space that opens
only into a bedroom or bathroom, and such room or space is used
for no other purpose and is provided with a solid weather-stripped
door equipped with an *approved* self-closing device. All
combustion air shall be taken directly from the outdoors in
accordance with Section G2407.6.

Figures G2407.6.1(1) AND G2407.6.1(2) are hereby deleted in their

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entirety.

1 **Figure G2407.6.2** is hereby amended to delete the reference to an
2 alternate opening location.

3 **Section G2407.11** is hereby amended to delete item number 5 as follows:

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

6 ***

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

8 **Section G2413.5** is hereby amended to read as follows:

9 Section G2413.5 (402.5) Allowable pressure drop. The design
10 pressure loss in any piping system under maximum probable flow
11 conditions, from the point of delivery to the inlet connection of the
12 appliance, shall be such that the supply pressure at the appliance is
13 greater than or equal to the minimum pressure required by the
14 appliance but such pressure loss shall not be greater than .5 inch
15 water column.

16 **Section G2417.4.1** is hereby amended to read as follows:

17 Section G2417.4.1 (406.4.3) -- Test pressure. The test pressure to
18 be used shall not be less than one and one half times the proposed
19 maximum working pressure, but not less than ~~3~~ 25 psig (~~20~~ kPa
20 gauge), irrespective of design pressure. Where the test pressure
21 exceeds 125 psig (~~862~~ kPa gauge), the test pressure shall not
22 exceed a value that produces a hoop stress in the piping greater
23 than 50 percent of the specified minimum yield strength of the
pipe.

Section G2419.2 is hereby amended to read as follows:

Section G2419.2 -- Drips. Where wet gas exists, a drip shall be
provided at any point in the line of pipe where condensate could
collect. ~~A drip shall also be provided at the outlet of the meter and~~
~~shall be installed so as to constitute a trap wherein an accumulation~~

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~~of condensate will shut off the flow of gas before the condensate will run back into the meter.~~

1
2 **Section G2425.8** is hereby amended to read as follows:

3 **Section G2425.8 (501.8) Equipment not required to be vented.**

4 The following *appliances* shall not be required to be vented:

- 5 1. Ranges.
6 2. Built-in domestic cooking units listed and marked for optional venting.
7 3. Hot plates and laundry stoves.
8 4. *Type 1 clothes dryers* (*Type 1 clothes dryers* shall be exhausted in
9 accordance with the requirements of Section G2439).
10 5. Refrigerators.
11 6. Counter *appliances*.
12 7. ~~Room heaters listed for unvented use.~~

13 Where the *appliances* listed in Items 5 ~~through 7~~ and 6 above are
14 installed so that the aggregate input rating exceeds 20 *Btu* per hour
15 per *cubic foot* (207 W/m³) of volume of the room or space in
16 which such *appliances* are installed, one or more shall be provided
17 with venting *systems* or other *approved* means for conveying the
18 *vent gases* to the outdoor atmosphere so that the aggregate input
19 rating of the remaining *unvented appliances* does not exceed 20
20 *Btu* per hour per *cubic foot* (207 W/m³). Where the room or space
21 in which the *appliance* is installed is directly connected to another
22 room or space by a doorway, archway or other opening of
23 comparable size that cannot be closed, the volume of such adjacent
room or space shall be permitted to be included in the calculations.

17 **Section G2425.12** is hereby amended to read as follows:

18 Section 2425.12 Residential and low-heat appliances flue lining
19 systems. Flue lining systems for use with residential-type and low-
20 heat appliances shall be limited to the following:

- 21 1. Clay flue lining complying with the requirements of ASTM
22 C 315 or equivalent when each appliance connected into
23 the masonry chimney has a minimum input rating greater

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than 400,000 Btu/h. Clay flue lining shall be installed in accordance with Chapter 10.

- 1 2. Listed chimney liner systems complying with UL 1777.
- 2 3. Other approved materials that will resist, without cracking, softening, or corrosion, flue gases and condensate at temperatures up to 1800 F (982 C).
 - 3 a. Aluminum (1100 or 3003 alloy or equivalent) not
 - 4 less than 0.032 inches thick up to 8 inches in
 - 5 diameter.
 - 6 b. Stainless steel (304 or 430 alloy or equivalent) not
 - 7 less than 26 gauge (0.018 inches thick) to 8 inches
 - 8 in diameter or not less than 24 gauge (0.024 inches
 - 9 thick) 8 inches in diameter and larger.

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

13 **Section G2427.5.2** is hereby amended to read as follows:

14 **Section G2427.5.2 (503.5.3) Masonry chimneys.** Masonry *chimneys*
15 shall be built and installed in accordance with NFPA211 and
16 shall be lined ~~with approved clay flue lining, a listed~~
17 ~~chimney lining system or other approved material that will~~
18 ~~resist corrosion, erosion, softening or cracking from vent~~
19 ~~gases at temperatures up to 1,800°F (982°C) as per G2425.12.~~

20 **Exception:** Masonry *chimney* flues serving listed gas
21 *appliances* with *draft hoods*, Category I *appliances* and
22 other gas *appliances* listed for use with Type B vents shall
23 be permitted to be lined with a *chimney* lining system specifically
listed for use only with such *appliances*. The liner
shall be installed in accordance with the liner manufacturer's
installation instructions. A permanent identifying
attached at the point where the connection is
to be made to the liner. The label shall read: "This *chimney*
liner is for *appliances* that burn gas only. Do not connect to
solid or liquid fuel-burning appliances or incinerators."

Section G2442.6 is hereby amended to read as follows:

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1 Section G2442.6 (618.6) -- Screen. Required outdoor air inlets
2 shall be covered with a screen having $\frac{1}{4}$ inch (6.4 mm) openings.
3 Required outdoor air inlets serving a nonresidential portion of a
4 building shall be covered with screen having openings larger than
5 $\frac{1}{4}$ inch (6.4 mm) and not larger than $\frac{1}{2}$ inch (25 mm).

6 **Section G2445** is hereby deleted in its entirety.

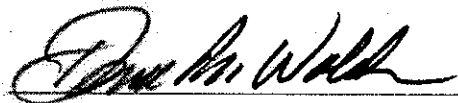
7 **Chapters 25 through 43** are hereby deleted in their entirety.

8 Section 2. Penalty.

9 A person who willfully violates this ordinance is guilty of an infraction.
10 Every person, firm or corporation violating an ordinance which is punishable as
11 an infraction shall be punished by a fine not to exceed \$500.00; the court to have
12 power to suspend said sentence and to revoke the suspension thereof.

13 Section 3. Effective Date.


14 This ordinance shall be in full force and effect from and after its passage,
15 approval and publication, but not prior to October 1, 2010.

16 

17 Dennis R. Walaker, Mayor

18 (SEAL)

19 Attest:

20 
21 Steven Sprague, City Auditor

22 First Reading: 06-01-2010
23 Second Reading: 06-14-2010
Final Passage: 06-14-2010
Publication: 07-05-2010