

The City of Wahpeton requires that all concrete footings for single family and multiple family dwellings shall be a minimum size of 10" thick x 24" wide with three (3) # 4 (1/2" diameter) reinforcing rods. The reinforcing rods shall have a minimum Concrete coverage of 2". All reinforcing rods are to be placed before any concrete is placed in the forms. Foundation walls that are to be 8'-0" in height shall have at least 4 rows of horizontally placed #4 bar, the first row shall start 12" above the footing. Each Vertical bar shall be placed per Table 404.1.2(9). Top of foundation wall must be 24" above city curb unless otherwise noted.

Table R404.1.2(9)
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. #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).
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.