

**Table R404.1.1 (5)
Concrete Foundation Walls
Minimum Vertical Reinforcement**

Maximum Wall Height (feet)	Wall Thickness (inches)		
	7.5	9.5	11.5
4	24	30	36
5	24	30	36
6	24	30	36
7	24	30	36
8	24	30	36
9	16	24	30
10	12	18	24

Notes to Table:

1. Reinforcing is based upon minimum yield strength of 60,000 psi. Reinforcement with a minimum yield strength of 40,000 psi or 50,000 psi is permitted, provided the same size bar is used and the spacing shown in the table is reduced by multiplying the spacing by 0.67 or 0.83, respectively.
2. Horizontal reinforcing shall be spaced at a maximum of 24 inches on center with one bar located within 12 inches of the top and bottom of the wall.
3. Spacing is based upon minimum #4 reinforcing bar. In lieu of #4 reinforcing bar, a larger bar size may be used provided, the bar spacing results in an equivalent cross-sectional area of reinforcement per linear foot of wall.
4. Reinforcement shall be placed nearest the inside face of the wall a distance d from the outside face (soil side) of the wall. The distance d is equal to the wall thickness, t , minus 1.25 inches plus one-half the bar diameter, d_b ($d = t (1.25 + d_b/2)$). The reinforcement shall be placed within a tolerance of $\pm 3/8$ inch where d is less than or equal to 8 inches, or $\pm 1/2$ inch where d is greater than 8 inches.
5. Concrete cover for reinforcement measured from the inside face of the wall shall not be less than $3/4$ inch. Concrete cover for reinforcement measured from the outside face of the wall shall not be less than $1 \frac{1}{2}$ inches for #5 bars and smaller, and not less than 2 inches for larger bars.
6. Concrete shall have a minimum compressive strength of not less than 3,000 psi at 28 days.
7. Walls with an unbroken wall line greater than 25 feet shall be provided with pilasters or shall be designed.
8. Walls exceeding 7 feet in height shall be restrained at bottom by floor slab.
9. Walls exceeding 10 feet in height require engineered design.