303.1.8 Mortar Joints and Reinforcement.
303.1.8.1 All mortar joints for hollow unit masonry shall extend the full width of face shells. Mortar joints for solid masonry shall be full head and bed joints.
303.1.8.2 Bed joints shall be 3/8 inch (± 1/8 inch) thick. Head joints shall be 3/8 inch (+ 3/8 inch or -1/4 inch) thick.
303.1.8.3 The bed joint of the starting course placed over footings shall be permitted to vary in thickness from a minimum of 1/4 inch to a maximum of 3/4 inch.
303.1.8.4 Masonry walls shall be running bond or stack bond construction. Walls of stack bond construction, in addition to required vertical reinforcement, shall be provided with a minimum of 9 gage horizontal joint reinforcement placed in bed joints not more than 16 inches on center.
303.1.8.5 Longitudinal wires of joint reinforcement shall be fully embedded in mortar or grout with a minimum cover of 5/8 inch when exposed to earth or weather and 1 1/2 inch when not exposed to earth or weather.

303.1.9 Cover Over Reinforcement.
303.1.9.1 For foundations, minimum concrete cover over reinforcing bars shall be:
1. 3 inches in foundations where the concrete is cast against and permanently in contact with the earth.
2. 1 1/2 inches for No. 5 and smaller bars and 2 inches for No. 6 and larger bars where concrete is formed and will be exposed to the earth or weather. In narrow footings where insufficient width is available to accommodate a standard 90 degree hook and provide the required concrete cover, the hook shall be rotated in the horizontal direction until the required concrete cover is achieved.
303.1.9.2 For concrete elements where concrete is not exposed to weather, the minimum concrete cover for reinforcing shall be 1 1/2 inches regardless of bar size.
303.1.9.3 For concrete elements where concrete is exposed to weather, the minimum concrete cover for reinforcing shall be:
1. 1 1/2 inches for No. 5 bars and smaller.
2. 2 inches for No. 6 bars and larger.
303.1.9.4 Reinforcing bars embedded in grouted masonry cells shall have a minimum clear distance of 1/4 inch for fine grout or 1/2 inch for coarse grout between reinforcing bars and any face of a cell.
303.1.9.5 Reinforcing bars used in masonry walls shall have a masonry cover (including grout) not less than:
1. 2 inches for masonry units with face exposed to earth or weather.
2. 1 1/2 inch for masonry units not exposed to earth or weather.

303.2 STEMWALL FOUNDATIONS

303.2.1 Footings.
303.2.1.1 Footings for stemwalls for a one-story or a two-story building shall be at least 20 inches wide by 10 inches thick and shall be reinforced with two No. 5 continuous bars.
303.2.1.2 Footings shall be level or shall be stepped so that both top and bottom of such footings are level.

303.2.2 Exterior Foundation Walls: Exterior foundation walls shall extend no more than 3 ft above the finish grade and shall be constructed with minimum 8 inch concrete masonry units in accordance with Figures 303A, B, and C or shall be constructed with a minimum 6 inch hollow clay brick or minimum 3 inch solid clay brick and minimum 4 inch hollow concrete masonry unit in accordance with Figure 303D1, D2, or D3.
303.2.2.1 Reinforcing for foundation walls illustrated in Figures 303A, B, and C shall comply with the following:
1. An 8x8 inch concrete or CMU bond beam with one No. 5 bar shall be used at the floor level. Reinforcing shall be continuous at corners by use of corner bars or bending; minimum lap is 25 inches.
2. Vertical reinforcement consisting of one No. 5 bar shall be used at 8 ft on center and shall terminate in the bond beam with a standard hook.
3. Footing dowel bars embedded a minimum of 6 inches into the footing shall be provided for all required vertical reinforcement. Dowels shall lap wall reinforcing a minimum of 25 inches.
4. All footing dowel bars shall have a standard 90 degree hook.
EXCEPTION: If uplift connectors are continuous from the exterior wall into the footing, vertical reinforcement is not required except at corners.
FIGURE 303A
WOOD FLOOR TO CONCRETE OR MASONRY STEMWALL

FIGURE 303B
SILL PLATE TO STEMWALL CONTINUITY REINFORCEMENT