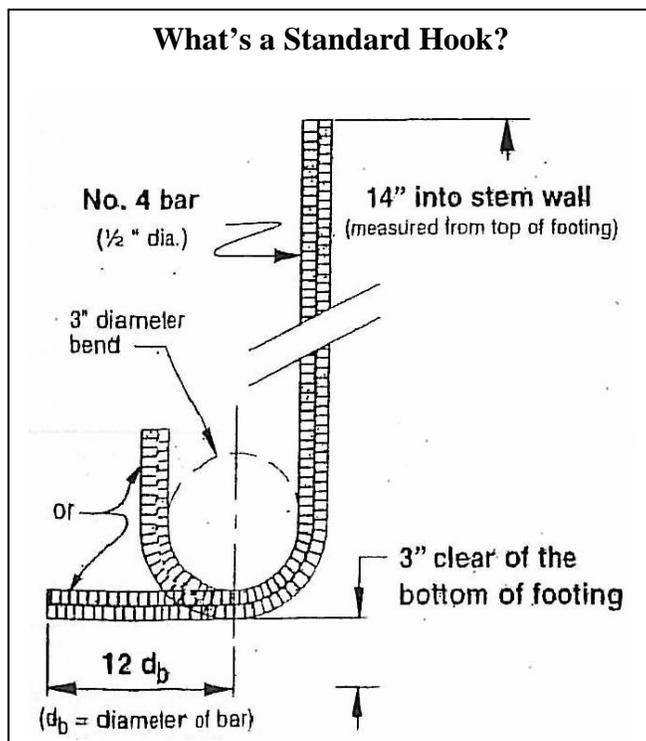


STATEWIDE INTERPRETATION

No. R403.1.4.1/R404.1.4
Oregon Dwelling Specialty Code

- SUBJECT:** Reinforcement Requirements in Footings and Foundation Walls
- CODE SECTION:** Oregon Dwelling Specialty Code (OTFDC) Sections R403.1.3.1 and R404.1.4
- CODE EDITION:** 2003 Edition of the Oregon Dwelling Specialty Code
- DATE:** October 29, 2003
- QUESTION:** What are the reinforcement requirements for footings and foundation stem wall in Seismic Design Categories D1 and D2?
- ANSWER:** When footings and foundation stem walls are poured monolithically and the heights of unbalanced backfill is 4 feet or less, one No. 4 horizontal bar shall be placed in the upper 12 inches of the stem wall and one No. 4 horizontal bar shall be placed in the footing located minimum 3 inches from the bottom.

When footings and foundation stem wall are poured at two separate times, creating a cold joint, all of the requirements for a monolithic pour as stated above are applicable, in addition to providing a vertical No. 4 bar every 4 feet on center. Vertical bars shall be provided with a **standard hook** (minimum $12d_b$ or 6 inches for No. 4 bar, plus $3d_b$ for curvature at the bend) and shall extend to within 3 inches of the bottom of the footing and a minimum 14 inches into the foundation stem wall.



R403.1.4 Seismic reinforcing. Concrete footings located in Seismic Design Categories D1 and D2, as established in Table R301.2(1), shall have minimum reinforcement.

Bottom reinforcement shall be located a minimum of 3 inches clear from the bottom of the footing. In Seismic Design Categories D1 and D2 where a construction joint is created between a concrete footing and stem wall, a minimum of one No. 4 bar shall be provided at not more than 4 feet on center. The vertical bar shall extend 3 inches clear of the bottom of the footing, have a **standard hook** and extend a minimum of 14 inches into the stem wall.

In Seismic Design Categories D1 and D2, where a grouted masonry stem wall is supported on a concrete footing and stem wall, a minimum of one No. 4 bar shall be provided at not more than 4 feet on center. The vertical bar shall extend to 3 inches clear of the bottom of the footing and have a **standard hook**.