

HUMBOLDT COUNTY BUILDING DEPARTMENT  
 CITY OF WINNEMUCCA BUILDING DEPARTMENT  
 FOUNDATION DETAIL FOR ONE AND TWO FAMILY CONSTRUCTION  
 2012 INTERNATIONAL RESIDENTIAL CODE

1. Plates, sills or sleepers on concrete or masonry which is in direct contact with earth shall be treated wood. R318 & 319.1(3)
2. Foundations supporting wood shall extend at least 6" above the adjacent finished grade. R319.1(5) & R401.1.6
3. Foundation plates or sills shall be bolted to the foundation or foundation wall with not less than 1/2" anchor bolts embedded at least 7" into concrete and spaced not more than 6' apart (2-story anchor bolts shall be placed 4' apart). There shall be a min. of (2) bolts per piece with one bolt located within 12" of each end of each piece. A min. of 0.229"x3"x3" thick plate washer shall be used on each bolt. A properly sized nut shall be tightened on each bolt to plate. Anchor bolts shall not be countersunk in the sill plate. R402 & R602.11.1
4. Min. of (1) #4 bar shall be installed within 12" of the top of the stemwall and (1) #4 rebar located 3" to 4" from the bottom of the footing. Where a construction joint occurs between a footing and stemwall install a min. 1/2" diameter rebar @ 48" o.c. The vertical bar shall extend 3" clear of bottom of the footing, have a standard hook & extend a min. of 14" into the stemwall. (R403.1.3).
5. Monolithic foundations shall have a min. of (1) #4 rebar at the top and bottom of the footing. Where slab is not cast monolithically with footing #3 or larger vertical dowels with standard hooks on each end shall be provided. All rebar shall be supported. R403.1.3.2
6. Footings & foundations shall extend below frost line (24" depth) and be continuous, including under garage door openings. R403.1.2 & R403.1.4.1 (Exception: **Freesanding** accessory structures 600 sq ft or less, of light frame construction with a max. 10' eave height shall not be required to have frost protected footings. Min. depth of such footings shall be 12". R403.1.4.1, Exception 1).
7. All exterior footings shall be placed at least 12" below undisturbed ground surfaces (refer to depth of footing in item #6 above). R403.1.4
8. Rebar shall not be bent with heat (IBC Section 1907.3.1) When lapping rebar the lap shall be a min. of 20" for #4 rebar.
9. The grade away from foundation wall shall fall a min. of 6" in the first 10'. R401.3
10. Underfloor areas shall be ventilated by openings of 1 sf/150 sf of floor area. With Class I vapor retarder the min. net area of ventilation openings shall not be less than 1/1500. Openings shall be provided within 3' of each corner. Close with 1/4" mesh. R408.1 & R408.2
11. Provide an 18"x24" foundation crawl space access. Access shall not be located under door to the residence. R408.4
12. Hold down devices are to be installed where required by wall bracing requirements of IRC 602.10 (simplified method of bracing without hold downs include a 4' braced panel at corners and every 25' (20' to inner edges of panels)).
13. All vertical reinforcement and seismic hardware shall be in place at the time of footing inspection.
14. Masonry walls shall be solidly grouted. R403.1.3

