

# Knox County Code Administration & Inspection

## IRC Residential Footing Information

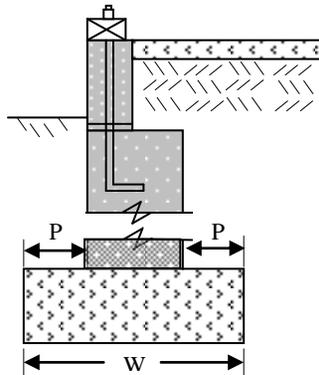


REV.112012

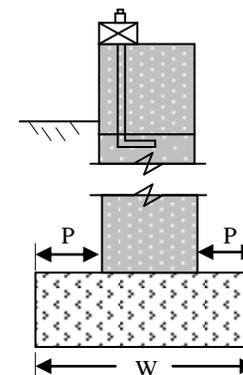
1. Footings are required on all exterior walls, beneath each end of interior girder beams, and beneath all posts supporting decks.
2. Minimum sizes for concrete and masonry footings are based on the load-bearing value of the soil, type of construction, and height of construction. **Table 1** below can be used to size footings.
3. Spread footings shall be at least 8" thick and shall have projections (P) at least 2" on each side of the foundation wall but not more than the thickness of the footing.
4. All exterior footings shall be placed such that the bottom of the footing is 12" minimum below the undisturbed ground surface or finished grade.
5. Additional footing information and requirements can be obtained in Section R403 of the 2012 International Residential Code®.
6. Slab footings shall be protected against frost by installing insulation per Section R403.3 of the 2012 International Residential Code®.

**TABLE 1: MINIMUM WIDTH (W) OF CONCRETE OR MASONRY FOOTINGS (inches)**

	LOAD-BEARING VALUE OF SOIL (psf)			
	1,500	2,000	3,000	≥ 4,000
<b>Conventional light-frame construction</b>				
<b>1-Story</b>	12	12	12	12
<b>2-Story</b>	15	12	12	12
<b>3-Story</b>	23	17	12	12
<b>4-inch Brick veneer over light frame or 8-inch hollow concrete masonry</b>				
<b>1-Story</b>	12	12	12	12
<b>2-Story</b>	21	16	12	12
<b>3-Story</b>	32	24	16	12
<b>8-inch Solid or fully grouted masonry</b>				
<b>1-Story</b>	16	12	12	12
<b>2-Story</b>	29	21	14	12
<b>3-Story</b>	42	32	21	16



GROUND SUPPORT SLAB WITH MASONRY WALL AND SPREAD FOOTING



BASEMENT OR CRAWL SPACE WITH MASONRY WALL AND SPREAD FOOTING

**Owner is responsible for scheduling footing inspections.**