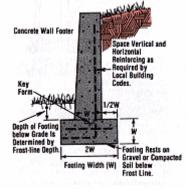
# Project

#### Required Tools & Materials

- QUIKRETE® 5000 High Early Strength Concrete Mix or QUIKRETE® Concrete Mix
- QUIKRETE® All-Purpose Gravel or crushed stone.
- Pick ax
- Square-faced shovel
- Tamper saw
- Screed
- Level
- Rebar
- Forming lumber
- Stake

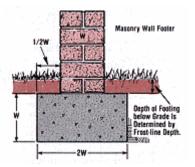
## Step by Step

Regardless of the type of masonry material you are using to build the wall, concrete is the material of choice for the footer. A typical footer is twice the width of a wall and equal in depth to the wall's width. The footer should rest on a 6" gravel base set below the frost line. Check with your local building department for the exact depth of the frost line in your area and for any local specifications concerning the footer design for the job you have in mind.



### **Constructing Footer Forms**

1. Lay out the footer location with batter boards as described in "Layout Basics". If the soil is firm enough to hold its shape when filled with wet concrete, consider making an earth form by digging to the correct depth and other dimensions with a square-faced shovel.



**2.** Firmly compact the soil using a tamper, and add 6" of QUIKRETE® All-Purpose Gravel or crushed stone to the base to ensure good drainage.

**3.** Screed guides, leveled and staked at the correct height, will help in striking off concrete in earth forms. After the screeding pass, these guides are removed and the gaps filled with extra concrete and leveled with a trowel.

**4.** In loose soils, construct strong wooden forms using sturdy lumber, stakes and nails. Form boards must be parallel and level.

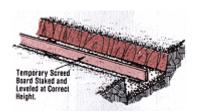
**5.** Place steel reinforcement bars 1/3 up from the base of the footer.

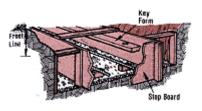




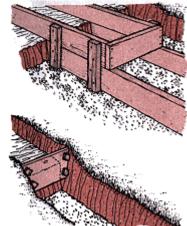


**6.** If the footer is to be the base of a poured concrete wall, install a keyway form as shown. This keyway will help tie together the footer and wall.





**7.** On slopes, construct a stepped footing to minimize the amount of concrete used. Stepped forms should rise no more that 2' per step and overlap at least 2' at each step. The same step principle can be used for earth forms.



## **Pouring the Footing**

1. Oil the forms with clean motor oil or a concrete release agent. Mix and pour the QUIKRETE® Concrete, working from one end of the form to the other. Fill all voids and work out the air pockets by working the end of a rod in and out of the concrete.



2. Screed the concrete level. If steel reinforcement is needed for the poured wall, insert it at this time. Predrilled holes in the keyway form make this an easy task. Remove the keyway form as soon as the concrete has set up sufficiently to hold its shape.

**3.** Cover the footer and allow it to cure for at least 3 to 4 days before removing forms and continuing work.

