

# Building on a Solid Foundation



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Eight steps for a stronger, safer foundation.

After you've selected your home site and determined how it will sit on the property from both an engineering and aesthetic perspective, the foundation work can begin. For those who may be unfamiliar with the process, listed below are the eight steps in building a solid home foundation.

## 1 Surveying

Your building site will be surveyed and stakes placed at the corners where your home will sit on the site. You'll also see *offset stakes* which mark the overdig area created to give the building crews room to work.



## 2 Excavation

To ensure a solid foundation on which your home will be built, the excavation is determined not only by the home's design, but also by soil composition, frost lines, and the height of the water table. It's very important that footings are set below the frost line to prevent heaving during colder months.

## 3 Footings

Footings are an important part of foundation construction. Typically made of poured concrete, the purpose of footings is to carry the weight of your home and prevent settling.

## 4 Tile/Under Slab Drain System

This system of drain tiles works to move water away from your foundation. Remember, your basement is literally a hole in the ground, so a good foundation will incorporate an effective drainage system to manage water. In heavier soils such as clay, sump pumps are used to assist in moving water away from the home.

## 5 Walls

To create exterior walls with poured concrete, pre-constructed forms (molds) are used and secured in place around the entire basement area. It is into these molds that concrete is poured and allowed to cure (harden) for approximately 10 days. The home design, the site and soil conditions can all affect the thickness of the walls that are poured. Anchor bolts or straps are also integrated into the top of the walls and used to attach the framing to the foundation.

## 6 Damp-Proofing

To protect the foundation walls from water infiltration, a black, tar-like substance is sprayed on the exterior facing. The composition of this water barrier sealant will vary based on soil conditions.

## 7 Basement Floor Slab

After the walls have cured and the forms have been removed, the basement floor slab will then be poured.



## 8 Backfilling

After the foundation has been created, the home site will be backfilled, i.e., areas of overdig will be filled-in, and the next phase of construction can begin.

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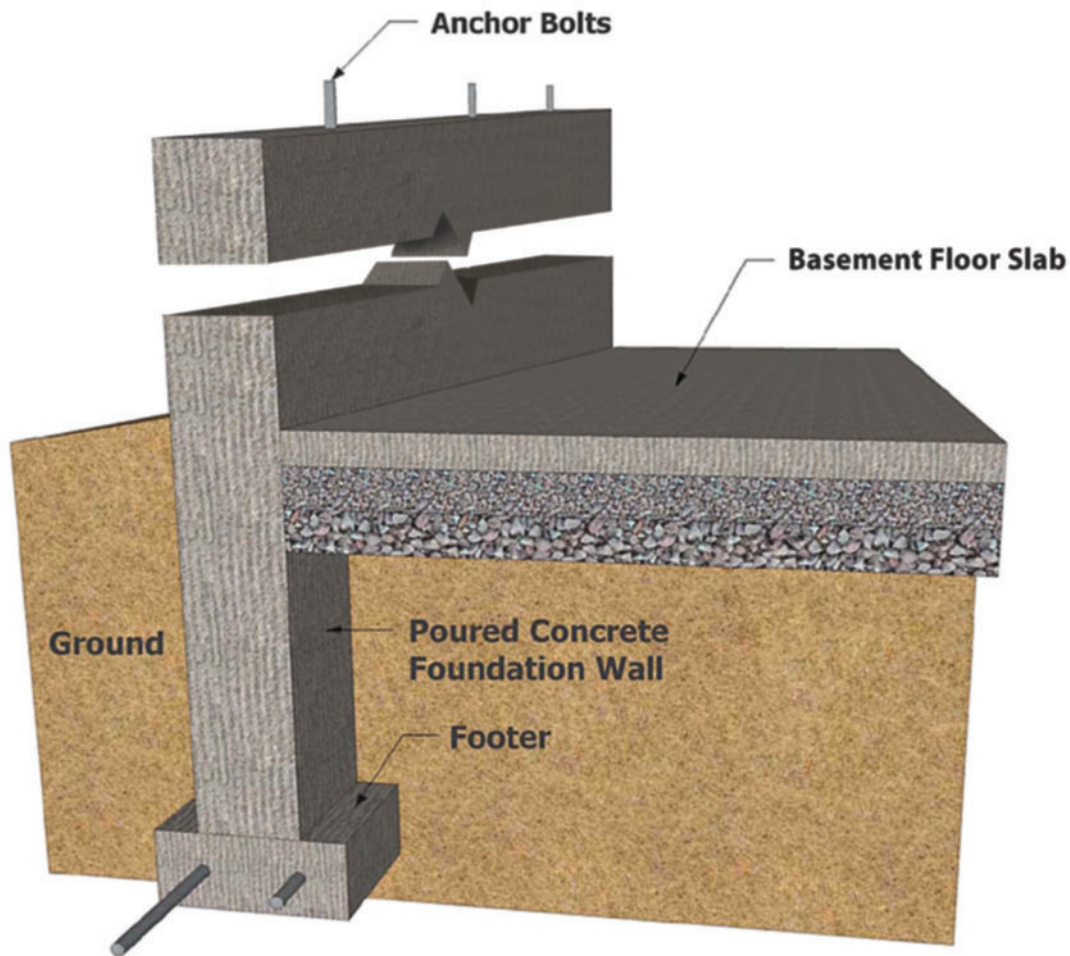


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This is an illustration of the various components in a home foundation.



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