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Footing Drain Pipe

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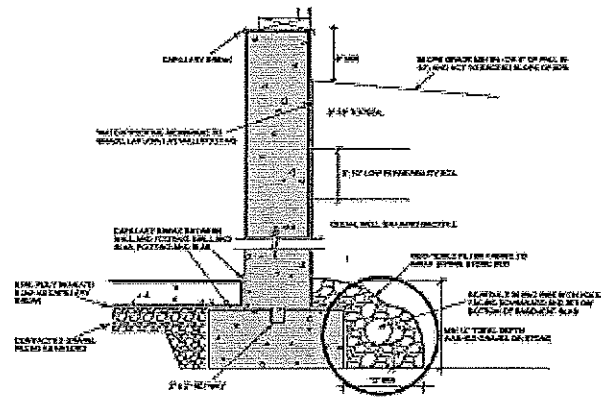
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Sales

Scope

Install drain tile (perforated plastic drainage pipe) along the exterior (or interior) of the footings of basement and crawlspace walls to provide drainage around the foundations.

- Install drain pipe to sit outside of, not on top of, the footings and below the bottom of the concrete slab or crawlspace floor.
- Lay the pipe with enough slope to drain to a non-perforated pipe that carries the collected water to daylight, to a drywell, to a storm sewer if approved by the local municipality, or to a sump pump that will transport it to daylight, a storm sewer, or a drywell.



Footing drain pipe is located exterior of the footings below the slab and is surrounded by washed stone and filter fabric.

- Lay the drain pipe, perforations down, in a gravel trench with at least 6 inches of ½-inch to ¾-inch washed gravel or stone above the pipe and at least 2 inches below ([IRC 2009](#)).
- Install landscape fabric under, around, and over the washed gravel ([IRC 2009](#), [ENERGY STAR 2015](#)).
- Alternately, use drain pipe encased in a filter-fabric sock and surround the cloth-covered pipe with gravel. Or, install a code-approved composite foundation drainage system (CFDS) ([IRC 2009](#), [ENERGY STAR 2015](#)).

According to the [International Residential Code](#) and ENERGY STAR Certified Homes, drain tile is not required when a certified hydrologist, soil scientist, or engineer has determined that a foundation is installed in well-drained ground or sand-gravel mixture soils, as identified in the [2009 IRC](#), Table R405.1.

See the [Compliance Tab](#) for related codes and standards requirements, and criteria to meet national programs such as DOE's Zero Energy Ready Home program, ENERGY STAR Certified Homes, and Indoor airPLUS.

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