

There's No Future in a Wet Foundation

DRAINAGE

Drainage provides water with a path of least resistance away from the foundation of your house.

- Drop the soil level 6 inches within the first 10 feet away from the foundation on all sides (equals a 5% slope);
- Crown the crawl space soil;
- Include perimeter footing drains if site drains poorly;
- Provide a swale on the uphill side of a house;
- Dampproof crawl space walls or waterproof basement walls;
- Include a vapor barrier underneath all slabs;
- Keep shrub foliage at least 5 feet away from foundation.

SITE SELECTION

Site selection is important when choosing land for a building site; consult a Soil Survey or Soil Conservation Service Office for information on:

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|---------------|----------------------------------|
| • Topography | • Flood zones |
| • Soil type | • Natural springs |
| • Water table | • Neighborhood drainage patterns |

Consult the County Health Department for a percolation test to determine the suitability of soil for a septic system.

If you choose to build on a potentially wet site you may need:

- Compensatory house design
- Gravity flow drainage system
- Sump pump
- Flood insurance

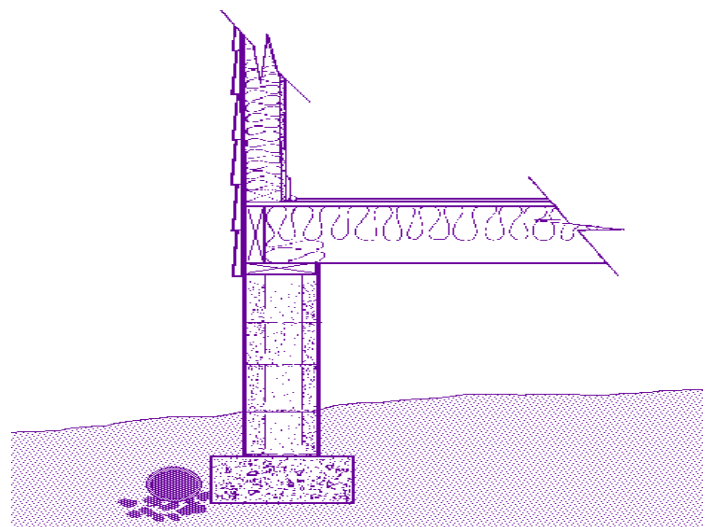
VENTILATION

Ventilation removes water vapor that could condense on the substructure or insulation and cause decay.

- Install a soil vapor barrier;
- Provide an adequate number of foundation vents;
- Don't block vents with landscape plants or stored items;
- Locate vents to assure good cross-ventilation;
- Keep vents open year around and insulate water pipes, floors and ducts;
- Don't allow ductwork to block cross-ventilation.

ADDITIONAL SOURCES OF MOISTURE AROUND THE BASE OF A HOUSE

- Dryer vents
- Misdirected runoff and roof water
- Sprinklers for irrigation systems
- Leaky plumbing
- Air conditioning condensate
- Plants requiring much water



If you would like more information on the following topics, ask your local Extension Service county agent for a copy of the leaflets mentioned. These leaflets are part of the total series of home moisture publications available from the Clemson University Cooperative Extension Service.

1. Placing a soil vapor barrier: see Extension leaflet "Installing Polyethylene in Crawl Spaces to Assist in Controlling Excess Moisture Vapor."
2. Number and placement of foundation vents: see CABO Code Book or Extension leaflet "Controlling Internal Moisture Problems in the Home."
3. Diagram showing minimum fall of 6 inches in first 10 feet away from a house: see Extension leaflet "Controlling External Moisture Problems for Residences."
4. Explanation of crowning a crawl space: see Extension leaflet "Most Common Moisture Control Construction Problems".
5. Installing a perimeter footing drain system: see Extension leaflet "Controlling External Moisture Problems for Residences."
6. Preparing a slab foundation before pouring: see Extension leaflet "Controlling External Moisture Problems for Residences."
7. Difference between dampproofing and waterproofing: call Extension housing specialist, Department of Agricultural and Biological Engineering, Clemson University.
8. Installing a downspout drainage system: see Extension leaflet "Controlling External Moisture Problems for Residences."
9. Installing a sump pump: see Extension leaflet "Controlling External Moisture Problems for Residences."
10. For a listing of all leaflets in this series: see Extension leaflet "Publications Directed Toward Moisture Control in Residences."

This bulletin is a companion document to the videotape entitled "There's No Future in a Wet Foundation", the second videotape in a five-part series on moisture-related problems in housing, "Managing Moisture—the Housing Menace". In this bulletin we re-emphasize and clarify specific points mentioned in the videotape. The objective of the series of videotapes is to raise housing industry and homeowner awareness of the many problems associated with excessive moisture accumulating in houses.

A list of other bulletins, videotapes and slide sets about moisture-related problems in residential housing can be obtained from your local Clemson University Cooperative Extension Service county agent.

As a minimum when building, follow building code requirements for your area. Additional precautions may be necessary, depending on your particular situation.

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