

# PLUMBING & ELECTRICAL NOTES

Many of the materials and techniques you use to build the structure of your house have changed little in last 50 or 100 years. This is not true of the electrical and plumbing systems which are subject to quickly changing technologies. They also have different sets of codes and often different inspections that can make it difficult for the owner-builder to be smart, safe and cost-effective when doing their own work.

I have known owner-builders who had to pull out newly installed electrical wiring or plumbing runs because they didn't get the memo on the new code changes.

Rather than try to teach yourself a couple of complex new building trades, it may be wiser to use a skilled electrician and plumber to help you with the initial layout and then the final connections and testing. In the middle you can do much of the apprentice work yourself. With the new flexible plastic supply piping, running water lines and wiring runs between connection points is much the same type of work. On the waste and vent side, most plumbing work involves chemically welded rigid plastic pipe. The biggest challenges there are usually proper vent layouts, slopes and cleanouts.

One of the first things to do for both of these systems is to spend a couple of hours at a building supply house getting familiar with current materials and fixtures. Take your plans along and use any electrical plan as a starting point to think of fixtures and switch locations. You will make lots of changes here and if you don't have an electrical plan the store may be able to help with a computer layout.

There are site specific connection points that you will want to locate on your plans:

- Water inlet and shut off valve.
- Sewer or septic outlet pipe and connection to the tank or sewer line.
- Electrical meter base and the panel box
- Connections for outdoor and future wiring & plumbing.

Here are two web links that might be helpful for this part of your building project:

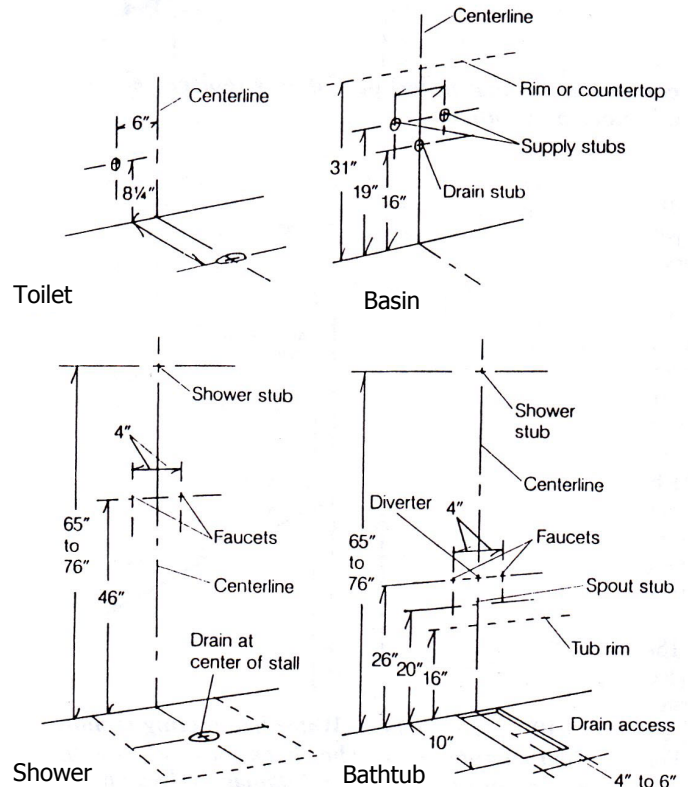
- 5 ways to build a house -

<http://countryplans.com/5-builders.html>

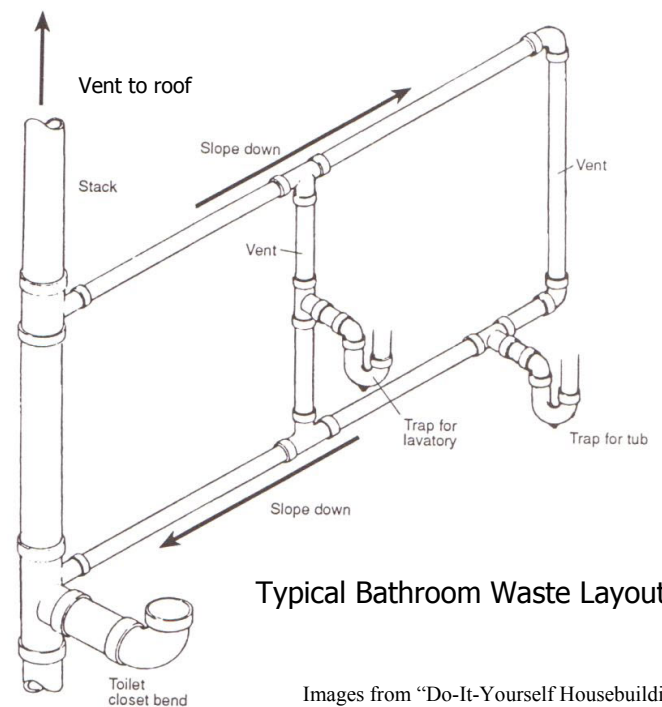
- Books (scroll to bottom of list) -

<http://countryplans.com/books.html>

John Raabe



Typical Rough-in Dimensions



Typical Bathroom Waste Layout

Waste to Sewer or Septic

Images from "Do-It-Yourself Housebuilding"  
by George Nash