



Steps to Building a House

Many homes are built using the same building practices due to a set of building codes that apply across the country. If you ever watch any house being built, you will find that it goes through the following steps:

1. **Grading and site preparation** - The first crew on the site handles site preparation. This crew will clear the land of any trees and make the soil suitable for building.



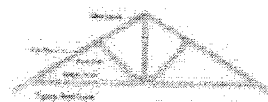
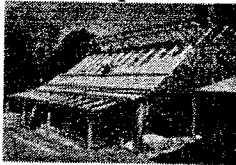
2. **Foundation construction** - Houses are generally built on a concrete foundation that consists of one of three main foundation types: a **basement**, **crawl space** or a **slab**. In wet and coastal areas, it is sometimes common to put houses up on posts as well. Foundations provide a concrete building space to build upon and support a house in weak soil.



3. **Framing** - Usually made of wood, framing is what makes up the house and gives it its shape. It also makes the wall stronger and outlines the layout of the house including the individual rooms.

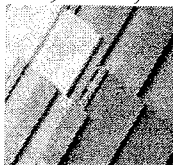


4. **Installation of windows and doors** - Doors provide an entryway for the house and rooms. Windows provide access for air and light to come into a room.
5. **Roofing** - The roof provides the shelter for the house and protects it from heat, rain, snow, etc. Some houses will use a truss as seen below to provide extra support to the roof.

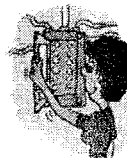


Truss

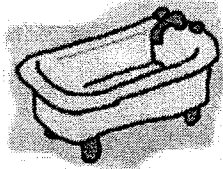
6. **Siding** - Sometimes made of a plastic known as vinyl. The siding protects the framing and insulation from the weather such as heat, rain, snow, sleet, wind, hail etc.



7. **Rough electrical** - The electrician will place all boxes for electrical outlets, lights, and switches and run wires through the wall and ceilings to a fuse box.



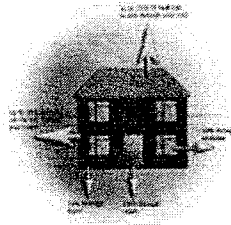
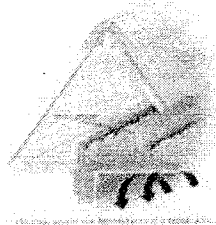
~~8~~ **Rough plumbing** - Installation of water lines, sewer lines, and bathtubs.



9. **Rough HVAC (Heating, Ventilation, and Air Conditioning)** - Heating and cooling vents and pipes are installed throughout the house in walls, ceilings, and floors.



10. **Insulation** - The insulation acts like a blanket for the house. It keeps hot air in when it is cold outside and keeps cold air in when it is hot outside. Without insulation heat would escape to the outside through the walls and windows.

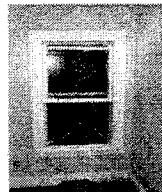


11. **Drywall** - Also known as plaster-board or "sheetrock" this is very heavy and sturdy. This gets put on the walls over the frame. This provides the wall with extra support and protects the inside frame of the house from moisture.



12. **Underlayment** - Plywood is put down on the floor and then covered with tar paper or a thin layer of plastic to protect against water and then a layer of particle board.

13. **Trim** - Slim wooden structures found around windows and doorways are added for a pleasing appearance.

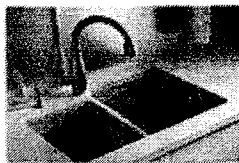


14. **Painting** - Applied to walls and ceilings to hide drywall seams as well as to make a room look nice.

15. **Finish electrical** - The electrician will return and install all light fixtures, wall outlets, switches and cover plates.

16. **Bathroom and kitchen counters and cabinets** - Provide storage and counter top space so that people can cook and clean.

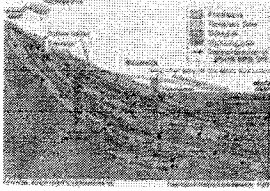
17. **Finish plumbing** - Once the cabinets are in, the plumber will return and install sinks, toilets and faucets. The plumber will also install the water heater if it was not installed during rough plumbing.



18. **Carpet and flooring** - Flooring provides a surface to walk on and carpet protects floors from being damaged

19. **Finish HVAC** - Installation of heating and air conditioning.

20. **Hookup to water main, or well drilling** - Provides a connection to city water or to a well. Houses that have wells rely on pumps deep within the ground to pump water from groundwater tables. If you live in a city your water probably comes from a reservoir (a lake used to store water for community use).



Well System

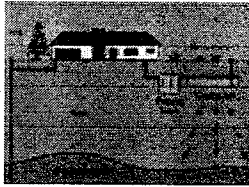


City Water Tower

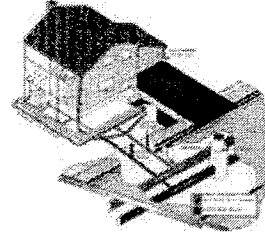


Reservoir

21. **Hookup to sewer or installation of a septic system** - Provides a connection to city sewer systems or a septic system. Septic systems are typically used in rural areas. They are a wastewater treatment system in which wastes are pumped directly from the home into a septic tank buried in the yard. If you live in a city your home is probably connected to a city sewer system.



Septic System



City Sewer System

22. **Punch list** At this point, the builder inspects the house, noting any problems. All problems are tabulated on a punch list. The different contractors return to fix all of the problems.

Directions: Answer the questions below by looking for the key words in the reading above.

1. What protects the framing and insulation of a house from rain, snow, sleet, and hail?

2. If you lived in a city would your water probably come from a well system or a reservoir?

3. If you lived in a rural area (an area of a small population) would you probably have a septic system to dispose of waste or would you be connected to a city sewer system?

4. Which part of a house acts like a "blanket for a house"?

5. What do houses need to have on the bottom to be built upon?

6. Which part of a house is usually made of wood and gives a house its shape?
