

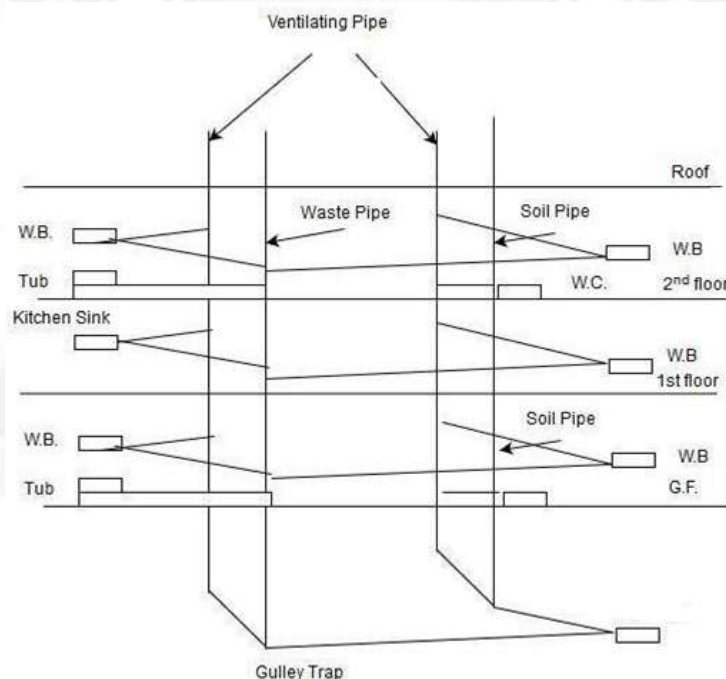
PLUMBING SYSTEMS FOR BUILDING:

Following are the four principle systems adopted in plumbing work in building

1. Two pipe system.
2. One pipe system.
3. Single stack system
4. Partially ventilated single stack system.

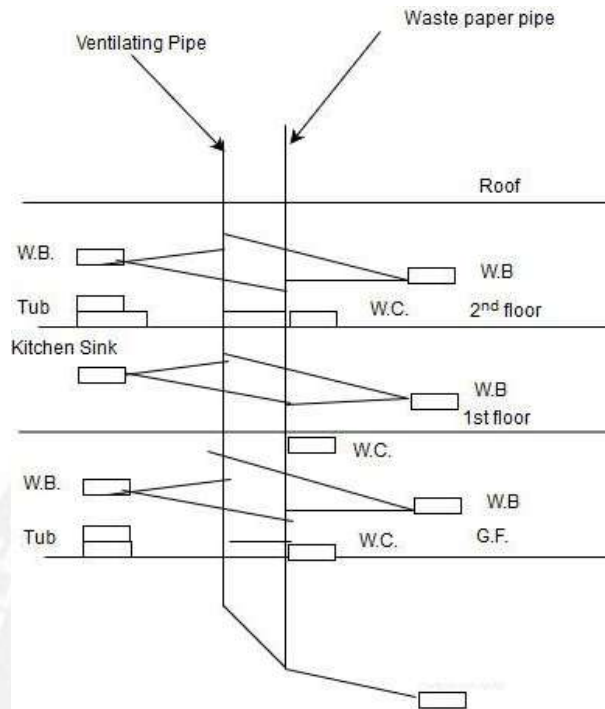
1) Two pipe system:

1. This is the best and most improved type of system of plumbing.
2. In this system, two sets of vertical pipes are laid, i.e. one for draining night soil and other for draining sullage.
3. The pipe of the first set carrying night soil are called soil pipes. and the pipes of the second set carrying sullage from baths etc are called sullage pipe or waste pipe
4. The soil fixtures, such as latrines and urinals are thus all connected through branch pipes to the vertical pipe.
5. Where the sludge fixtures such as baths, sinks, wash-basins, etc are all connected through branch pipes to the vertical waste pipe.
6. The soil pipe as well as the waste pipe are separately ventilated by providing separate vent pipe as shown in figure



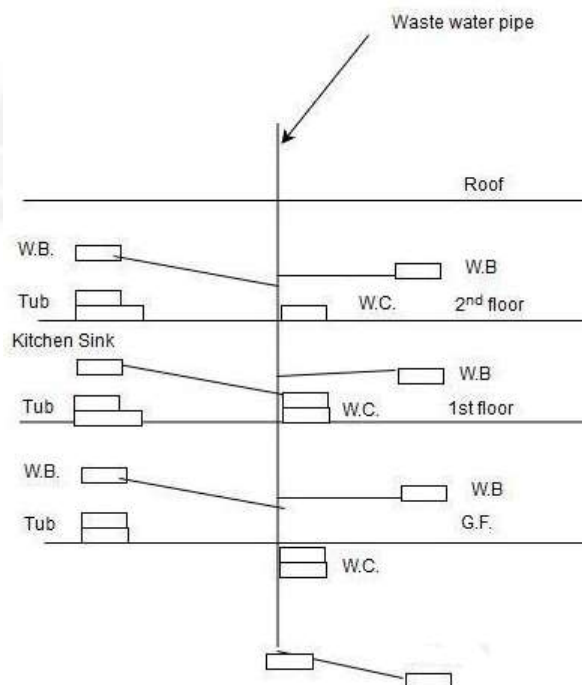
2) One pipe system:

In this system, instead of using two separate pipes (for carrying sullage and night soil, as it done in the above described two pipe system), only main vertical pipe is provided which collects the night soil as well as the sullage water from their respective fixtures through the branch pipes. This main pipe is ventilated in itself by providing cowl at its top and in addition to this, a separate vent pipe is also provided, as shown in the figure.



3) Single Stack System:

This system is a single pipe system without providing any separate ventilation pipe. It uses only one pipe which carries the sewage as well as sullage, and is not provided with any separate vent pipe, except that it itself is extended up to about 2m higher than the roof level and provided with a cowl for removal of foul gases as shown in fig.



4) Partially ventilated single stack:

This is an improved form of single stack system in the sense that in this system, the traps of water closets are separately ventilated by a separate vent pipe called relief vent pipe. This system uses two pipes as in single pipe system but the cost of branches is considerably reduced compared to single pipe system.

