

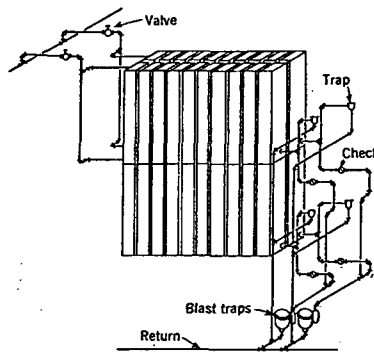


FIG. 12. SUPPLY AND RETURN CONNECTIONS FOR HEATING UNITS OF CENTRAL FAN SYSTEMS

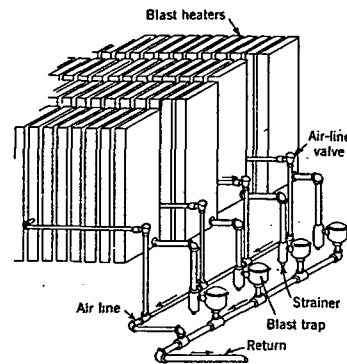


FIG. 13. TYPICAL CONNECTIONS TO CENTRAL FAN SYSTEM HEATING UNITS EXCEEDING 12 SECTIONS

Horizontal return pipes may be carried past doorways and other obstructions by using the scheme illustrated in Fig. 17. It will be noted that the large pipe, in this case, runs below the obstruction and the smaller one over it.

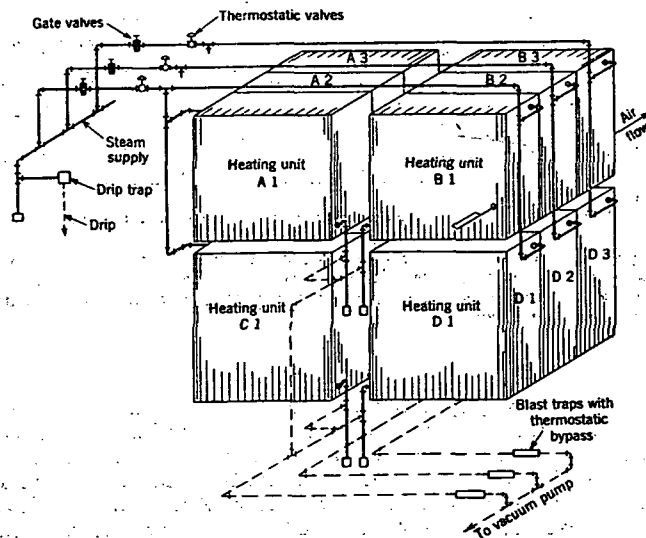


FIG. 14. TYPICAL PIPING FOR ATMOSPHERIC AND VACUUM SYSTEMS WITH THERMOSTATIC CONTROL (CENTRAL FAN SYSTEM)

Branches from steam mains in one-pipe gravity steam systems should use the *preferred connection* shown in Fig. 18, but where radiator condensation does not flow back into the main the *acceptable* method shown in the same figure may be used. This acceptable method has the advantage of giving a perfect swing joint when connected to the vertical riser or radiator connection, whereas the preferred connection does not give this swing

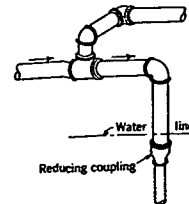


FIG. 15. DRIPPING MAIN WHERE IT RISES TO HIGHER LEVEL

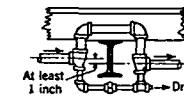


FIG. 16. LOOPING MAIN AROUND BEAM

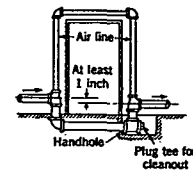


FIG. 17. LOOPING DRY RETURN MAIN AROUND OPENING

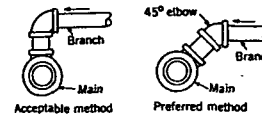


FIG. 18. METHODS OF TAKING BRANCH FROM MAIN

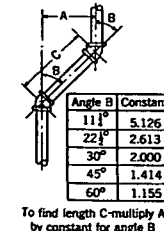


FIG. 19. CONSTANTS FOR DETERMINING LENGTH OFFSET PIPE

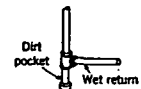


FIG. 20. DIRT POCKET CONNECTION

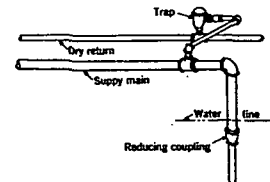


FIG. 21. DRIPPING END OF MAIN INTO WET RETURN

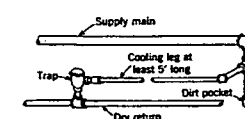


FIG. 22. DRIPPING END OF MAIN INTO DRY RETURN

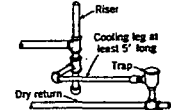


FIG. 23. DRIPPING HEEL OF RISER INTO DRY RETURN

without distorting the angle of the pipe. Runouts from the steam main are usually made about 5 ft long to provide flexibility for movement in the main.

Offsets in steam and return piping should preferably be made with 90-deg ells but occasionally fittings of other angles are used, and in such cases the length of the diagonal offset will be found as shown in Fig. 19.

Dirt pockets, desirable on all systems employing thermostatic traps, should be so located as to protect the traps from scale and muck which