

221100 BUILDING SERVICES PIPING

1. All underground utility lines require a trace wire mounted under the line with no breaks from point to point. Data trace wires should be installed within the conduit.
2. Victaulic piping is permitted in exposed areas, but not in concealed spaces.
3. Steam and condensate piping shall be Schedule 80.
4. Underground steam and condensate piping shall have 3/8-inch PVC jacket with minimum 3" foam glass insulation, INSUL 800 by ROVANCO or approved equal.
5. Provide link seals where underground piping enters a building.
6. Balancing valves are preferred over gate valves at all sizes, for balancing.
7. Valves 2" and larger shall be flanged. Valves under 2" shall be screwed.
8. PVC piping is acceptable for drain lines and sewer lines.
9. PVC piping is not acceptable for heating pipe or tempered water pipe or any pressurized system.
10. Avoid ball joints on steam systems.
11. Flexible connections for pipe to equipment shall be stainless steel braids.
12. Backflow preventers shall be provided on all new water and fire mains to buildings.
13. Provide isolation valves on all pieces of equipment and on branch piping.
14. Provide Ashcroft gages and snubbers on gages.
15. Provide bypass piping on critical service piping.
16. Provide water treatment on all systems. Provide emergency eyewash and shower at all chemical treatment feed stations.
17. Power pressure pumps are preferred over electric condensate pumps.

18. Provide protection of piping at job site. Temporarily seal ends.
19. Provide large elbow sweeps for piping from roof drains. Provide for overflow.
20. Water, steam, and gas meters shall be installed in all new construction or renovation work. Meters shall be tied into the campus Energy Management System.