**Section 250.2490 Plumbing and Other Piping Systems**

a) General

All plumbing systems shall be designed and installed in accordance with the requirements of the Illinois Plumbing Code, except that the number of waterclosets, urinals, lavatories, bathtubs, showers, drinking fountains, and other fixtures shall be as required by this Part and the hospital programs.

b) Plumbing Fixtures

1) Plumbing fixtures shall be of nonabsorptive acid-resistant materials.

2) The water supply spout for lavatories and sinks required for filling pitchers and for medical and nursing staff and food handlers' hand-washing, shall be mounted so that its discharge point has a minimum perpendicular distance of 5 inches above the rim of the fixture.

3) Hand-washing lavatories used by medical and nursing staff and food handlers shall be trimmed with valves that can be operated without the use of hands where specifically required in this Part.

A) When blade handles are used, the blade handles shall not exceed 4½ inches in length, except that the handles on clinical sinks shall not be less than 6 inches in length.

B) The hand-washing and/or scrub sinks, for operating, emergency treatment, nursery, and delivery rooms shall be trimmed with valves that are aseptically operated (i.e., knee or foot controls) without the use of hands. Wrist blades are not acceptable.

4) Clinical rim flush sinks shall have an integral trap in which the upper portion of a visible trap seal provides a water surface.

5) Shower bases and tubs shall be provided with nonslip surfaces.

c) Water Supply Systems

1) Systems shall be designed to supply water at sufficient pressure to operate all fixtures and equipment during maximum demand periods.

2) Each water service main, branch main, riser and branch to a group of fixtures shall be valved. Stop valves shall be provided at each fixture.

3) Flush valves installed on plumbing fixtures shall be of a quiet operating type, equipped with silencers.

4) Bedpan-flushing devices shall be provided on each patient toilet unless a clinical service sink is centrally located in each nursing unit. This requirement does not apply to psychiatric units.

5) Water distribution systems shall be arranged to provide hot water at each hot water outlet at all times. Hot water at shower, bathing, and hand-washing facilities shall not exceed 110º F (43º C). If the program requires, in psychiatric units, plumbing fixtures that require hot water and are accessible to patients shall be supplied with hot water not to exceed 100º F (38º C).

d) Hot Water Heaters and Tanks

1) The hot water heating equipment shall have sufficient capacity to supply water at the temperatures and quantities in the following areas:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Clinical | Dietary | Laundry |
| gallons/hour/bed | 6½ | 4 | 4½ |
| liters/second/bed | .007 | .004 | .005 |
| temperature ºF | 100 | 180 | 180 |
| temperature ºC | 43 | 82 | 82 |

Water temperatures are to be taken at the hot water point of use or at the inlet to the processing equipment.

2) Storage tanks shall be fabricated of corrosion-resistant metal or lined with non-corrosive material.

e) Drainage Systems

1) Drain lines from sinks in which acid wastes may be poured shall be constructed of acid-resistant material.

2) Insofar as possible, drain piping shall not be installed over operating and delivery rooms; nurseries; food preparation, serving, and storage areas; and similar critical areas. Special precautions shall be taken to protect these areas from possible leakage or condensation from overhead piping systems.

3) Floor drains shall not be installed in operating rooms. Flushing rim type drains may be installed in cytoscopic operating rooms.

4) Building sewers shall discharge into a public sewer system.

5) When a public sewer system is not available, plans for any private sewage disposal system shall be submitted to the Environmental Protection Agency for review for approval before hospital construction is started.

f) Nonflammable medical gas systems shall be installed in accordance with NFPA 99, Standard for Health Care Facilities.

g) Clinical vacuum (suction) systems shall be installed in accordance with NFPA 99, Standard for Health Care Facilities.

h) Medical compressed air systems shall be installed in accordance with NFPA 99, Standard for Health Care Facilities.

i) Oxygen, vacuum, and medical compressed air shall be piped to the locations indicated in Table E with the required station outlets.

j) Service outlets for central housekeeping vacuum systems, if used, shall not be located within operating rooms.

k) Fire Extinguishing Systems

1) All fire extinguishing systems shall be designed, installed, and maintained in accordance with NFPA 101, Life Safety Code, NFPA 13, Standards for the Installation of Sprinkler Systems, and NFPA 25A, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.

2) Class III, Type 1 inside standpipe systems shall be provided in all buildings more than four stories or 55 feet in height. Such standpipe systems shall comply with NFPA 14, Standard for the Installation of Standpipe, Private Hydrants and Hose Systems.

(Source: Amended at 35 Ill. Reg. 6386, effective March 31, 2011)