**Section 390.2730 Plumbing Systems**

a) All plumbing systems shall be designed and installed in accordance with the requirements of the Department's rules entitled "Illinois Plumbing Code" (77 Ill. Adm. Code 890), except that the number of resident required water closets, lavatories, bathtubs, showers, and other fixtures shall be as required by the standards and the facility program. (B)

b) Plumbing Fixtures

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

2) The water supply spout for lavatories and sinks required for filling pitchers for nursing staff and food handlers' handwashing, shall be mounted so that its discharge point is a minimum distance of five inches above the rim of the fixture. (B)

3) Handwashing lavatories used by nursing staff and food handlers, shall be trimmed with valves which can be operated without the use of hands. When blade handles are used for this purpose, the blade handles shall not exceed four and one half inches in length, except the handles on clinical sinks shall not be less than six inches in length.

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

5) The potwashing sink shall be a three compartment sink with one compartment at least 14 inches deep.

6) Shower bases and tub bottoms shall be designed with nonslip surfaces. (B)

c) Water Supply Systems

1) Water supply systems shall be designed to supply water at sufficient pressure and volume 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) Hot water distribution systems shall be arranged to provide hot water of at least 100 degrees Fahrenheit at each hot water outlet at all times.

5) Hot water available to residents at shower, bathing and handwashing facilities shall not exceed 110 degrees Fahrenheit. (A, B)

6) Each hot water system serving resident areas shall include at least one of the following equipment requirements to insure that the water temperature does not exceed 110 degrees Fahrenheit:

A) A thermostatically controlled mixing valve, or

B) An aquastat which limits the water temperature in the water heater to a maximum temperature of 110 degrees Fahrenheit and a solenoid operated shut off valve activated by a sensing element in the water line which shuts off the water and activates an alarm at the nurses station when the water temperature exceeds 110 degrees Fahrenheit. (A, B)

d) Hot Water Heaters and Tanks

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | Resident Service | Dietary | Laundry |
| gallons/hour/bed | 6½ | 4 | 4½ |
| Temperature (Degrees Fahrenheit) | 110 | 140\* | 180 |

\*180 degrees Fahrenheit water is required at dishwasher and pot and pan sink. Water temperatures to be taken at the point of use or discharge of the hot water or inlet to processing equipment.

2) Water storage tanks shall be fabricated of corrosion resistant metal or lined with noncorrosive material.

e) Drainage Systems

 Insofar as possible drainage piping shall not be installed above the ceiling nor installed in an exposed location in food preparation centers, food serving facilities, food storage areas, and other critical areas. Special precautions shall be taken to protect these areas from possible leakage or condensation from necessary overhead piping systems. (B)

f) Nonflammable Gas System. Nonflammable medical gas systems if installed shall be in accordance with the requirements of National Fire Protection Association Standards 56A and 56F. (B)

g) Clinical Vacuum (Suction) Systems. Clinical vacuum systems if installed shall be in accordance with the requirements of the Compressed Gas Association Pamphlet P-2.l. (B)

h) Fire Extinguishing Systems

1) A complete automatic sprinkler system shall be installed throughout all facilities regardless of construction type. (A, B)

2) All sprinkler and other fire extinguishing systems shall be designed and installed in accordance with National Fire Protection Association Standard 101 and referenced codes. (A, B)

3) All sprinkler systems shall be maintained in accordance with National Fire Protection Association Standard 13A. (A, B)

(Source: Amended at 14 Ill. Reg. 14904, effective October 1, 1990)