**Section 225.8040 Plumbing Systems**

a) All plumbing systems shall be designed and installed in accordance with the requirements of the 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 this Part and the facility program.

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 by nursing staff and for food handlers' hand washing shall be mounted so that its discharge point is a minimum distance of five inches above the rim of the fixture.

3) Hand-washing lavatories used by nursing staff and food handlers shall be trimmed with valves that 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 pot-washing sink shall be a three compartment sink with one compartment at least l4 inches deep.

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

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 100º F at each hot water outlet at all times.

5) Hot water available to residents at shower, bathing and hand-washing facilities shall not exceed 110º F.

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

A) A thermostatically controlled mixing valve, or

B) An aquastat that limits the water temperature in the water heater to a maximum temperature of 110º F and a solenoid operated shut-off valve activated by a sensing element in the water line that shuts off the water and activates an alarm at the nurses' station when the water temperature exceeds 110º F.

d) Water Heaters and Tanks

1) Capacity and Temperature Requirements

A) The 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 | 6/1/2 | 4/1/1 | 4/1/2 |
| Temperature (º F) | 110 | 140\* | 180 |

\*180º F water required at dishwasher and pot and pan sink.

B) 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 or 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.

f) Fire Extinguishing Systems

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

2) All sprinkler and other fire extinguishing systems shall be designed and installed in accordance with National Fire Protection Association Standard 101.

3) All sprinkler systems shall be maintained in accordance with National Fire Protection Association Standard 101.