

2.5 Building Systems

Appendix material, shown in shaded boxes at the bottom of the page, is advisory only.

■ 2.5-1 General

2.5-1.1 Application

2.5-1.1.1 This chapter contains elements that are common to most types of residential health, care, and support facilities. The elements are required only when referenced in a common element or specific facility chapter in Part 3 (Residential Health Facilities), Part 4 (Residential Care and Support Facilities), and Part 5 (Non-Residential Support Facilities).

2.5-1.1.2 Additional specific requirements are located in the facility chapters in Parts 3, 4, and 5. Consult the facility chapters to determine whether elements in this chapter are required.

2.5-1.2 Building System Design

2.5-1.2.1 Facilities shall have building systems that are designed and installed in a manner that provides for the safety, comfort, and well-being of residents, participants, or outpatients.

2.5-1.2.2 The primary goal in building system design shall be to support resident, participant, and outpatient needs and/or operational functions. Energy consumption and efficiency shall be a secondary goal.

■ 2.5-2 Plumbing Systems

2.5-2.1 General

In the absence of local and state plumbing codes, all plumbing systems shall be designed and installed in accordance with the *International Plumbing Code*.

2.5-2.2 Plumbing and Other Piping Systems

2.5-2.2.1 General Piping and Valves

All piping, except control-line tubing, shall be identified.

2.5-2.2.2 Potable Water Supply Systems

2.5-2.2.2.1 Capacity

- (1) Systems shall be designed to supply water at pressures sufficient to operate all fixtures and equipment during maximum demand.
- (2) Supply capacity for hot- and cold-water piping shall be determined on the basis of fixture units, using recognized engineering standards.

2.5-2.2.2.2 Valves. Each water service main, branch main, riser, and branch to a group of fixtures shall have valves.

- (1) Stop valves shall be provided for each fixture.
- (2) Access panels shall be provided at all valves where required.
- (3) Valves shall be tagged, and a valve schedule shall be provided to the facility owner for permanent record and reference.

2.5-2.2.2.3 Backflow prevention

- (1) Systems shall be protected against cross-connection in accordance with American Water Works Association (AWWA) *Recommended Practice for Backflow Prevention and Cross-Connection Control*.
- (2) Vacuum breakers or backflow prevention devices shall be installed on hose bibs and supply nozzles used to connect hoses or tubing to housekeeping sinks and, where used, to bedpan-flushing attachments.