

NFPA 99-Proposed 2012 Edition

Standard for Health Care Facilities

TIA Log No. 1031

Reference: Chapter 8 (New)

Comment Closing Date: July 20, 2011

Submitter: Roger Lautz, Affiliated Engineers, Inc.

1. Add a new Chapter 8 to read as follows:

Chapter 8 Plumbing

8.1 Applicability.

8.1.1 This chapter shall apply to construction of new health care facilities, except as noted in 8.1.2 and 8.1.3.

8.1.2 This chapter shall also apply to the altered, renovated, or modernized portions of existing systems or individual components.

8.1.3 Existing construction or equipment shall be permitted to be continued in use when such use does not constitute a distinct hazard to life.

8.1.4 Definitions.

8.1.4.1 Nonmedical Compressed Air. Air that is used for purposes other than patient care or medical devices that provide direct patient care.

8.2* System Category Criteria. The health care facility's governing body that has the responsibility for the building system components as identified in this chapter shall designate, in accordance with the function of each space, building system categories in accordance with Sections 4.1 and 4.2.

8.2.1* The category of risk applied to each plumbing system serving a space shall be independent of the category of risk applied to other systems serving that same space.

8.3 General Requirements.

8.3.1 Potable Water. Potable water systems shall comply with applicable plumbing codes.

8.3.2 Nonpotable Water. Nonpotable water systems shall comply with applicable plumbing codes.

8.3.3 Water Heating. Maximum hot water temperatures shall comply with *AIA Guidelines for the Design and Construction of Health Care Facilities*.

8.3.4 Water Conditioning. Water shall be treated or heated to control pathogens in the water.

8.3.5 Nonmedical Compressed Air.

8.3.5.1 Nonmedical air compressors shall comply with UL and ASME.

8.3.5.2 Nonmedical compressed air shall not be used for medical instruments or for human respiration.

8.3.6 Special Use Water Systems. When special use water systems are required, application of standards shall be provided in accordance with appropriate publicly reviewed nationally published standards.

8.3.7 Grease Interceptors.

8.3.7.1 Sizing for grease interceptors shall be permitted per local plumbing codes on an engineered calculation factoring meals served per day.

8.3.7.2 Grease interceptors shall be sized to capture grease from kitchen cooking and cleaning functions and shall prohibit introduction of grease into the sanitary sewer system.

8.3.8 Fixtures. Plumbing fixtures shall be suitable for the intended use.

8.3.9 Black Waste Water. Black waste water shall be discharged to a sanitary sewer or private on-site waste treatment system as permitted by applicable plumbing codes.

8.3.10 Grey Waste Water.

8.3.10.1 Grey waste water shall be permitted to be stored on-site and used for nonpotable water systems as permitted by applicable plumbing codes.

8.3.10.2 Grey waste water shall not be used for any system that aerosolizes the water in a breathing zone or has direct contact with humans.

8.3.10.3 Excess grey waste water shall be discharged to a sanitary sewer or private on-site waste treatment system as permitted by applicable plumbing codes.

8.3.11 Clear Waste Water.

8.3.11.1 Clear waste water shall be permitted to be stored on-site and used for nonpotable water systems as permitted by applicable plumbing codes.

8.3.11.2 Clear waste water that has been treated to potable water standards shall be permitted to be used as nonpotable water.

8.3.11.3 Clear waste water that has not been treated to potable water standards shall not be used for any system that aerosolizes the water in a breathing zone or has direct contact with humans.

8.3.11.4 Excess clear waste water shall be discharged to a storm sewer, held in detention ponds, or recharged into the water table as permitted by applicable plumbing codes.

A.8.2.1 There are no interdependencies for each type of system (e.g., medical gas, electrical, potable water, nonpotable water, nonmedical compressed air, heating). A risk assessment of each system should be conducted to evaluate the risk to the patient, staff, and visitors. It is possible when applying this section to identify multiple categories of systems serving a single patient. For example see Table A.8.2 and A.4.1.

Table A.8.2 Category Designation by Function — Plumbing

Function	Potable	Nonpotable	Special Use	Water Conditioning	Water Heating	Process Air	Fuel
Airborne infection isolation room	2	NA	NA	NA	3	NA	NA
Burn patient care rooms	2	NA	NA	NA	3	NA	NA
Business offices/administration	4	4	4	4	4	4	4
Central sterile room	2	NA	NA	NA	3	2	NA
Class A surgical procedures	2	NA	NA	NA	3	NA	NA
Class B surgical procedures	2	NA	NA	NA	3	NA	NA
Class C surgical procedures	2	NA	NA	NA	3	NA	NA
Critical care rooms (Category 1 room)	2	NA	NA	NA	3	NA	NA
Emergency department trauma room	2	NA	NA	NA	3	NA	NA
Hemodialysis	2	NA	2	NA	3	NA	NA
Intensive care	2	NA	NA	NA	3	NA	NA
Medical records	4	4	4	4	4	4	4
Morgue	2	NA	NA	NA	3	NA	NA
PACU	2	NA	NA	NA	3	NA	NA
Patient education	4	4	4	4	4	4	4
Pharmacy	2	NA	NA	NA	3	NA	NA
Protective environment room	2	NA	NA	NA	3	NA	NA
Radiology	2	NA	NA	NA	3	NA	NA
Speech therapy	4	4	4	4	4	4	4
Waiting rooms	4	4	4	4	4	4	4

NA: Not applicable

Note: This is a sample table. The numbers represented in this table might not be consistent with the health care facility scenario.

Submitter’s Substantiation: Chapter 8, Plumbing, was returned to the committee at the Association Technical Meeting in June 2011. As a result, there are no requirements for any plumbing system in a health care facility. The committee feels it is necessary to reference local and national codes for the installation of a plumbing system to provide guidance to the users of NFPA 99. It was stated at the Association Technical Meeting, and agreed upon, that in the event of Chapter 8 being returned, the committee would process a TIA to bring back the necessary language that the committee felt was not controversial and would make the document a more useable code.

Emergency Nature: It is important to process the following TIA immediately to correct an omission as NFPA 99 will be incomplete without the reference to local and national codes for plumbing system in a health care facility. Health care facilities depend on the requirements of NFPA 99 for the various systems such as electrical, medical gas and vacuum, security systems and information systems but the code will be incomplete if the plumbing requirements do not exist, thus leaving the users and designers without any specific guidance. This TIA will correct a situation that has an adverse impact on the safety of patients and staff in health care facilities as well as an adverse impact on the adoption of the code.

Anyone may submit a comment by the closing date indicated above. To submit a comment (on company letterhead), please identify the number of the TIA and forward to the [Secretary, Standards Council](#), 1 Batterymarch Park, Quincy, MA 02169-7471.