

***2.5-3.5.2.2 Duct humidifiers.** If humidification is provided, the following requirements shall be met:

- (1) If duct humidifiers are located upstream of the final filters, the humidifiers shall be placed at least twice the rated distance for full moisture absorption upstream of the final filters.
- (2) Ductwork with duct-mounted humidifiers shall have a means of water removal.
- (3) Humidifiers shall be connected to airflow proving switches that prevent humidification unless the required volume of airflow is present or high-limit humidistats are provided.
- (4) All duct takeoffs shall be sufficiently downstream of the humidifier to ensure complete moisture absorption.
- (5) Steam humidifiers shall be used. Use of reservoir-type water spray or evaporative pan humidifiers shall not be permitted.

2.5-3.5.3 Exhaust Systems

2.5-3.5.3.1 To enhance the efficiency of recovery devices required for energy conservation, combined exhaust systems shall be permitted.

2.5-3.5.3.2 Fans serving exhaust systems shall be located at the discharge end and shall be readily serviceable.

2.5-3.6 HVAC Filters

See common element and facility chapters in Parts 3 through 5 for requirements.

2.5-3.7 Heating Systems, Cooling Systems, and Equipment

2.5-3.7.1 General

See common element and facility chapters in Parts 3 through 5 for requirements in addition to those in this section.

2.5-3.7.2 Heating Systems

Facilities shall have a permanently installed heating system capable of maintaining an interior minimum temperature of 72° F (22° C) under heating design temperatures.

2.5-3.7.3 Cooling Systems

Facilities shall be configured and equipped with a cooling system capable of maintaining an interior maximum temperature of 75°F (24°C) under cooling design temperatures.

*2.5-3.7.4 Temperature Control

2.5-3.7.4.1 Rooms containing heat-producing equipment. These rooms, such as laundries or computer rooms, shall be mechanically or naturally ventilated.

■ 2.5-4 Electrical Systems

2.5-4.1 General

2.5-4.1.1 Applicable Standards

All electrical material and equipment, including conductors, controls, and signaling devices, shall be installed in accordance with NFPA 70: *National Electrical Code*®.

2.5-4.1.2 Testing and Documentation

All electrical installations and systems shall be tested to verify that equipment has been installed and operates as designed.

2.5-4.2 Power-Generating and Power-Storing Equipment

See common element and facility chapters in Parts 3 through 5 for requirements.

feedwater may be supplied either from soft or reverse osmosis water. Provisions should be made for periodic cleaning.

A2.5-3.7.4 Individual temperature controls should be provided for resident sleeping rooms.

APPENDIX

A2.5-3.5.2.2 One way to achieve basic humidification may be by a steam-jacketed manifold-type humidifier with a condensate separator that delivers high-quality steam. Additional booster humidification (if required) should be provided by steam-jacketed humidifiers for each individually controlled area. Steam to be used for humidification may be generated in a separate steam generator. The steam generator