

121. NEW CONSTRUCTION STANDARDS.

01. Applicability. These rules apply to: (1-1-88)

a. All new construction of a health care facility. (1-1-88)

b. Conversion of any existing building (not licensed) for use as a health facility or part thereof. (1-1-88)

c. Construction additions to existing licensed health care facilities, e.g., added beds, wings, services, etc. (1-1-88)

d. Any major alterations to a licensed facility. (1-1-88)

e. Modernization and remodeling: (1-1-88)

i. Design and standards of new construction shall be applicable to modernization and remodeling, except that when existing conditions make changes impractical to accomplish, minor deviations from functional requirements (not fire safety and other safety equipments) may be permitted if the intent of the rules is met and if the care and safety of the patients/residents will not be jeopardized. (1-1-88)

ii. When it is not feasible to modernize the entire structure in accordance with these new construction standards, approval may be given for renovations of less than the entire structure if the operation of the facility or the safety of the patients/residents is not jeopardized by the remaining nonconforming section. (1-1-88)

02. Plans, Specifications, and Inspections. New facility construction or any addition, conversion or renovation of an existing facility is governed by the following rules: (1-1-88)

a. Prior to commencing work pertaining to construction of new buildings or any additions or structural changes to existing facilities, or conversion of buildings to be used as a facility, plans and specifications shall be submitted to, and approved by, the Department to assure compliance with the applicable construction standards, codes, rules and regulations. (1-1-88)

b. The plans and specifications shall be prepared by, or executed under, the immediate supervision of a licensed architect registered in the state of Idaho. The employment of an architect may be waived by the Department in certain minor alterations. (1-1-88)

c. Preliminary plans shall be submitted and shall include at least the following: (1-1-88)

i. The assignment of all spaces, size of areas and rooms, and indicated in outline the fixed and movable equipment and furniture. (1-1-88)

ii. The plans shall be drawn at a scale sufficiently large to clearly present the proposed design, but not less than a scale of one-eighth inch (1/8") equals one foot (1'). (1-1-88)

iii. The drawings shall include a plan for each floor, including the basement or ground floor; approach or site plan, showing roads, parking areas, sidewalks, etc. (1-1-88)

iv. The total floor area and number of beds shall be computed and noted on the drawings. (1-1-88)

v. Outline specifications shall provide a general description of the construction, including interior finishes; acoustical material, its extent and type and heating, electrical and ventilation systems. (1-1-88)

d. Before commencing construction, the working drawings shall be developed in close cooperation with, and approved by, the Department and other appropriate agencies. (1-1-88) i. Working drawings and specifications shall be well prepared so that clear, distinct prints may be obtained, accurately dimensioned, and shall include all necessary explanatory notes, schedules, legends, and stamped with the licensed architect's seal. (1-1-88) ii. Working drawings shall be complete and adequate for contract purposes. Separate drawings shall be prepared for each of the following branches of work: architectural, mechanical and electrical. (1-1-88)

e. Prior to occupancy, the facility shall be inspected and approved by the licensing agency. The agency shall be notified at least two (2) weeks prior to completion in order to schedule a final inspection. (1-1-88)

03. Codes and Standards. New construction features shall be in accordance with applicable local, state and national standards, codes and regulations in effect at the time of the construction, addition, remodeling or renovation. (1-1-88)

a. In the event of a conflict of requirements between codes, the most restrictive shall apply. (1-1-88)

b. Compliance with the applicable provisions of the following codes and standards will be required by, and reviewed for, by this agency: (1-1-88)

i. The Life Safety Code, 1985 edition, and referenced publications (see Section 106). (12-31-91)

ii. American National Standard Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People (ANSI A117.1-1980). (1-1-88)

iii. Idaho Department of Health and Welfare Rules, IDAPA 16.02.19, "Food Safety and Sanitation Standards for Food Establishments." (12-31-91)

04. Site Requirements. The location of all new facilities or conversion of existing buildings is controlled by the following criteria: (1-1-88)

a. It shall be adjacent to an all-weather road(s). (1-1-88)

b. It shall be accessible to physician's services and medical facilities. (1-1-88)

c. It shall be accessible to public utilities. (1-1-88)

d. It shall be in a lawfully constituted fire district. (1-1-88)

e. Each facility shall have parking space to satisfy the minimum needs of patients/residents, employees, staff and visitors. In the absence of a local requirement, each facility shall provide not less than one (1) space for each day shift staff member and employee, plus one (1) space for each five (5) patient/resident beds. This ratio may be reduced in areas convenient to a public transportation system or to public parking facilities provided that approval of any reduction is obtained from the appropriate state agency. Space shall be provided for emergency and delivery vehicles. (1-1-88)

05. Patient/Resident Care Unit. Each patient/resident care unit shall be in compliance with the following: (1-1-88)

a. The number of beds in a unit shall not exceed sixty (60); (1-1-88)

b. At least eighty percent (80%) of the beds shall be located in rooms designed for one (1) or two (2) patients/residents; (1-1-88)

c. At least one (1) room in each facility shall be available for single occupancy for isolation of disease or for privacy in personality conflict or disruptive patient/resident situations. Each isolation room shall meet the following requirements: (1-1-88)

i. All features of regular patient/resident rooms, as described in Subsection 121.05.d.; (12-31-91)

ii. Supply an entry area which is adequate for gowning; (1-1-88)

iii. Supply a handwashing lavatory in or directly adjacent to the patient/resident room entry; (1-1-88) iv. Provide a private toilet; (1-1-88) v. Have finishes easily cleanable; and (1-1-88) vi. Not be carpeted; (1-1-88)

d. Each patient/resident room shall meet the following requirements: (1-1-88)

i. Maximum room capacity of four (4) patients/residents; (1-1-88)

ii. Minimum room area, exclusive of toilet rooms, closets, lockers, wardrobes, alcoves or vestibules shall be one hundred (100) square feet in single-bed rooms and eighty (80) square feet in multiple bed rooms per patient/resident; (1-1-88)

iii. Multiple bed rooms shall be designed to permit no more than two (2) beds side by side, parallel to the window wall; (1-1-88)

iv. Beds in all rooms shall be placed so that they are three (3) feet apart; two (2) feet away from the side wall parallel with beds and three (3) feet, six (6) inches from the end of the bed to the opposite wall, or other obstructions; (1-1-88)

v. A lavatory shall be provided in each patient/resident room. The lavatory may be omitted from single-bed or two (2) bed room when a lavatory is located in an adjoining toilet room which serves that room only; (1-1-88)

- vi. Each patient/resident shall have access to a toilet room without entering the general corridor area. One (1) toilet room shall serve no more than four (4) beds, and no more than two (2) patient/resident rooms. The toilet room shall contain a water closet and a lavatory. The lavatory may be omitted from a toilet room if each patient/ resident room served by that toilet room contains a lavatory; (1-1-88)
- vii. Each patient/resident shall be provided, within the room, a wardrobe, locker or closet with a minimum of four (4) square feet. Common closets are not permitted. An adjustable clothes rod and adjustable shelf shall be provided; (1-1-88)
- viii. Each patient/resident room cannot be located more than one hundred twenty (120) feet from the soiled workroom or the soiled holding room; (1-1-88)
- ix. Each room shall have a window which can be opened without the use of tools. The window sill must not be higher than three (3) feet above the floor and shall be above grade. The window shall be at least one-eighth (1/8) of the floor area and shall be provided with shades or drapes; (1-1-88)
- x. Cubicle curtains of fire retardant material, capable of enclosing the bed shall be provided in multiple-bed rooms to insure privacy for the patients/residents. Alternatives to this arrangement may be allowed if the alternative provides the same assurance of privacy; (1-1-88)
- xi. Mirror(s) shall be arranged for convenient use by patients/residents in wheelchairs, as well as by patients/residents in standing position; (1-1-88)
- xii. A staff calling system shall be installed at each patient/resident bed and in each patient/resident toilet, bath and shower room. The staff call in the toilet, bath and shower room shall be an emergency call. All calls shall register at the staff station and shall activate a visible signal in the corridor at the patient's/resident's door. The emergency call system shall be designed so that a signal light activated at the patient's/resident's station will remain lit until turned off at the patient's/resident's calling station; (1-1-88)
- xiii. All patient/resident rooms shall be visible to a staffed nurse's station; (1-1-88)
- xiv. Each patient/resident room shall be an outside room; (1-1-88)
- xv. Patients/residents cannot be cared for or housed in any attic story, trailer house or in any room other than an approved patient/resident room; (1-1-88)
- xvi. Patient/resident beds shall not be placed in hallways or any location commonly used for other than bedroom purposes; (1-1-88)
- xvii. Ceiling heights in patient/resident rooms shall be a minimum of eight (8) feet; (1-1-88)
- xviii. No room can be used for a patient/resident room which can only be reached by passing through another patient/resident room, utility room or any other room. All patient/resident rooms shall have direct access to an exit corridor; (1-1-88)

xix. Patient/resident rooms shall not open into any room in which food is prepared, served or stored; and (1-1-88)

xx. All patient/resident rooms shall be numbered. All other rooms shall be numbered or identified as to purpose. (1-1-88)

e. Service Areas. The following service areas shall be located in, or readily available to, each patient/ resident care unit. The size and disposition of each service will depend upon the number and types of beds to be served. Although identifiable spaces are required to be provided for each of the indicated functions, consideration will be given to design solutions which would accommodate some functions without specific designation of areas or rooms. Details of such proposals shall be submitted for prior approval. Each service area may be arranged and located to serve more than one (1) patient/resident care unit, but at least (1) such service area shall be provided on each patient/resident floor and as follows: (1-1-88)

i. Staff station with space for charting and storage for administrative supplies. It shall also be convenient to handwashing facilities; (1-1-88)

ii. Lounge and toilet room(s) for staff (toilet room may be unisex); (1-1-88)

iii. Individual closets or compartments for the safekeeping of coats and personal effects of personnel. These shall be located convenient to the duty station of personnel or in a central location; (1-1-88)

iv. Clean workroom or clean holding room. If the room is used for work, it shall contain a counter and handwashing facilities. When the room is used only for storage as part of a system for distributing clean and sterile supplies, the work counter and handwashing facilities may be omitted; (1-1-88)

v. Soiled workroom or soiled holding room. The soiled workroom shall contain a clinical sink or equivalent flushing rim fixture sink for handwashing, work counter, waste receptacle, and soiled linen receptacle. When the room is used only for temporary holding of soiled materials, the work counter may be omitted; (1-1-88)

vi. Drug distribution station. Provision shall be made for secure, convenient and prompt twenty-four (24) hour availability of medicine to patients/residents. A secure medicine preparation area shall be available and under the nursing staff's visual control and contain a work counter, refrigerator, and locked storage for controlled drugs, and shall have a minimum area of fifty (50) square feet. A medicine dispensing unit may be located at the nurse's station, in the clean workroom, or in an alcove or other space convenient to staff for staff control; (1-1-88)

vii. Clean linen storage. A separate closet or a designated area within the clean workroom shall be provided. If a closed cart system is used, storage may be in an alcove; (1-1-88)

viii. Nourishment station. The station shall contain a sink equipped for handwashing, equipment for serving nourishment between scheduled meals, refrigerator, and storage cabinets. Ice for patients'/residents' service and treatment shall be provided only by icemaker-dispenser units; (1-1-88)

ix. Equipment storage room(s). Room(s) shall be available for storage of equipment such as I.V. stands, inhalators, air mattresses, and walkers; (1-1-88)

x. Parking for stretchers and wheelchairs. Parking for stretchers and wheelchairs shall be located out of the path of normal traffic; (1-1-88)

xi. Patient bathing facilities. A minimum of one (1) bathtub or shower shall be provided for each ten (10) beds not otherwise served by bathing facilities at patient rooms. Patients shall have access to at least one (1) bathtub in each nursing unit. Each tub or shower shall be in an individual room or enclosure which provides space for private use of the bathing fixture, for drying and dressing, and for a wheelchair and attendant. At least one (1) shower in each central bathing facility shall be a minimum of four (4) feet square without curbs and be designed for use by a wheelchair patient. (1-1-88)

f. Patient/Resident Toilet Facilities. Each patient/resident toilet room shall meet the following criteria: (1-1-88)

i. The minimum dimensions of a room containing only a water closet shall be three (3) feet by six (6) feet. Additional space shall be provided if a lavatory is located within the same room. Water closets shall be accessible for use by wheelchair patients/residents. (1-1-88)

ii. At least one (1) room on each floor shall be appropriate for toilet training. It shall be accessible from the corridor. A clearance of three (3) feet shall be provided at the front and at each side of the water closet and the room shall contain a lavatory. (1-1-88)

iii. A toilet room shall be accessible to each central bathing area without having to go through the general corridor. This may be arranged to serve as the required toilet training facility. (1-1-88)

g. Sterilizing Facilities. A system for the sterilization of equipment and supplies shall be provided. (1-1-88)

06. Patient/Resident Dining and Recreation Areas. The following minimum requirements apply to dining/recreation areas. (1-1-88)

a. Area Requirement. The total area set aside for these purposes shall be at least thirty (30) square feet per bed with a minimum, total area of at least two hundred twenty-five (225) square feet. For facilities with more than one hundred (100) beds, the minimum area may be reduced to twenty-five (25) square feet per bed. If day care programs are offered, additional space shall be provided as needed to accommodate for day care patients/residents needing naps or for dining and activities. (1-1-88)

b. Storage. Storage space shall be provided for recreational equipment and supplies. (1-1-88)

07. Rehabilitation Therapy Facilities. Each facility shall include provisions for physical and occupational therapy for rehabilitation of long term care patients/residents. Areas and equipment shall be as necessary to meet the intent of the program. As a minimum, the following shall be located on-site, convenient for use to the nursing unit: (1-1-88)

- a. Space for files, records and administrative activities. (1-1-88)
- b. Storage for supplies and equipment. (1-1-88)
- c. Storage for clean and soiled linen. (1-1-88)
- d. Handwashing facilities within the therapy unit. (1-1-88)
- e. Space and equipment for carrying out each of the types of therapy that may be prescribed. (1-1-88)
- f. Provisions for patient privacy. (1-1-88)
- g. Janitor closets, in or near unit. (1-1-88)
- h. If the program includes outpatient treatment, additional provisions include: (1-1-88)
 - i. Convenient access from exterior for use by the handicapped. (1-1-88)
 - ii. Lockers for secure storage of patients'/residents' clothing and personal effects. (1-1-88)
 - iii. Outpatient facilities for dressing and changing. (1-1-88) iv. Showers for patient/resident use. (1-1-88)
 - i. Waiting area with provision for wheelchair outpatients. (1-1-88)

08. Personal Care Unit. A separate room shall be provided with equipment for hair care and grooming needs of the patients/residents. (1-1-88)

09. Dietary Facilities. The food service facilities and equipment shall comply with Idaho Department of Health and Welfare Rules, IDAPA 16.02.19, "Food Safety and Sanitation Standards for Food Establishments," and additional requirements as follows. Food service facilities shall be designed and equipped to meet the requirements of the facility. These may consist of an on-site conventional food preparation system, a convenience food service system, or an appropriate combination thereof. (12-31-91)

a. Functional Elements. The following facilities shall be provided in such size as required to implement the type of food service system selected: (1-1-88)

- i. Control station for receiving food supplies. (1-1-88)
- ii. Storage space to accommodate a one (1) week supply of staple foods and a two (2) day supply of perishable foods. (1-1-88)
- iii. Food preparation facilities as required by the program. Conventional food preparation systems require space and equipment for preparing, cooking and baking. Convenience food service systems such as frozen prepared meals, bulk packaged entrees, individually packaged portions, or systems using contractual commissary services will require space and equipment for thawing, portioning, cooking, and/or baking. (1-1-88)

iv. Handwashing facility(ies) in the food preparation area. (1-1-88)

v. Patient/resident meal service space including facilities for tray assembly and distribution. (1-1-88)

vi. Warewashing in a room or an alcove separate from food preparation and serving areas. This shall include commercial type dishwashing equipment. Space shall also be provided for receiving, scraping, sorting, and stacking soiled tableware and for transferring clean tableware to the using area. Handwashing facilities shall be conveniently available. (1-1-88)

vii. Potwashing facilities. (1-1-88)

viii. Waste storage facilities which are easily accessible for direct pickup or disposal. (1-1-88)

ix. Office or suitable work space for the dietitian or food service supervisor. (1-1-88)

x. Toilets for dietary staff with handwashing facility immediately available. (1-1-88)

xi. Janitor's closet located within the dietary department. The closet shall contain a floor receptor or service sink and storage space for housekeeping equipment and supplies. (1-1-88)

10. Administration and Public Areas. The following shall be provided: (1-1-88)

a. Entrance at grade level, sheltered from the weather and able to accommodate wheelchairs. (1-1-88)

b. Lobby space, including: (1-1-88) i. Storage space for wheelchairs. (1-1-88) ii. Reception and information counter or desk. (1-1-88) iii. Waiting space(s). (1-1-88) iv. Public toilet facilities. (1-1-88) v. Public telephone(s). (1-1-88) vi. Drinking fountain(s). (1-1-88)

c. General or individual office(s) assuring privacy for interviews, business transactions, medical and financial records, and administrative and professional staff. (1-1-88)

d. Multipurpose room for conferences, meetings, and health education purposes. (1-1-88)

e. Storage for office equipment and supplies. (1-1-88) **11. Linen Services.** The following shall apply: (1-1-88)

a. If linen is to be processed on site, the following shall be provided: (1-1-88)

i. Laundry processing room with commercial type equipment with which a seven (7) days' need can be processed within a regularly scheduled work week. Handwashing facilities shall be provided; (1-1-88)

ii. Soiled linen receiving, holding, and sorting room with handwashing facilities. (1-1-88)

- iii. Storage for laundry supplies. (1-1-88)
- iv. Clean linen inspection and mending room or area. (1-1-88)
- v. Clean linen storage, issuing, and holding room or area. (1-1-88)
- vi. Janitor's closet containing a floor receptor or service sink and storage space for housekeeping equipment and supplies. (1-1-88)

b. If linen is processed off the site, the following shall be provided: (1-1-88)

- i. Soiled linen holding room. (1-1-88)
- ii. Clean linen receiving, holding, inspection and storage room(s). (1-1-88)
- iii. Storage area for carts. (1-1-88)

12. Central Stores. General storage room(s) shall have a total area of not less than ten (10) square feet per bed and shall generally be concentrated in one (1) area. (1-1-88)

13. Janitors' Closets. In addition to the janitors' closets called for in certain departments, sufficient janitor's closets shall be provided throughout the facility to maintain a clean and sanitary environment. These shall contain a floor receptor or service sink and storage space for housekeeping equipment and supplies. (1-1-88)

14. Engineering Services and Equipment Areas. The following shall be provided: (1-1-88)

a. Equipment room(s) or separate building(s) for boilers, mechanical equipment and electrical equipment. (1-1-88)

b. Office or suitable desk space for the engineer. (1-1-88)

c. Maintenance shop(s). (1-1-88)

d. Storage room(s) for building maintenance supplies. (1-1-88)

e. Yard equipment storage consisting of a separate room or building for yard maintenance equipment and supplies if ground maintenance is provided by the facility. (1-1-88)

15. Details and Finishes. A high degree of safety for the patients/residents shall be provided to minimize the incidence of accidents with special consideration for patients/residents who will be ambulatory to assist them in self-care. Hazards such as sharp corners shall be avoided. All details and finishes for modernization projects as well as for new construction shall comply with the following requirements: (1-1-88)

a. Details: (1-1-88)

- i. Items such as drinking fountains, telephone booths, vending machines, and portable equipment shall be located so as not to restrict corridor traffic or reduce the corridor width below the required minimum.(1-1-88)
- ii. All rooms containing bathtubs, sitz baths, showers and water closets subject to occupancy by patients/residents shall be equipped with doors and hardware which will permit access from the outside of the rooms in an emergency. When such rooms have only one (1) opening or are small, the doors must open outwards or be designed to be opened without the need to push against a patient/resident who may have collapsed within the room. (1-1-88)
- iii. The minimum width of all doors to rooms needing access for beds or stretchers shall be three (3) feet, eight (8) inches. Doors to patient/resident toilet rooms and other rooms needing access for wheelchairs shall have a minimum width of two (2) feet, ten (10) inches. (1-1-88)
- iv. Windows and outer doors which may be frequently left in an open position shall be provided with insect screens. (1-1-88)
- v. Doors, except doors to spaces such as small closets which are not subject to occupancy, shall not swing into corridors in a manner that might obstruct traffic flow or reduce the required corridor width. Large walk-in type closets are considered as occupiable space. (1-1-88)
- vi. Doors, sidelights, borrowed lights, and windows in which the glazing extends down to within eighteen (18) inches of the floor (thereby creating a possibility for accidental breakage by pedestrian traffic) shall be glazed with safety glass, wire glass, or plastic glazing material that will resist breaking and will not create dangerous cutting edges when broken. Similar materials shall be used in wall openings of recreation rooms and exercise rooms unless required otherwise for safety. Safety glass or plastic glazing materials as noted above shall be used for shower doors and bath enclosures. (1-1-88)
- vii. Dumbwaiters, conveyors and material handling systems shall not open directly into a corridor or exitway. (1-1-88)
- viii. Thresholds and expansion joint covers shall be made flush with the floor surface to facilitate use of wheelchair and carts. (1-1-88)
- ix. Grab bars shall be provided at all patient/resident toilets, showers, tubs and sitz baths. The bars shall have one and one-half (1-1/2) inches clearance to walls and shall have sufficient strength and anchorage to sustain a concentrated load of two hundred fifty (250) pounds. (1-1-88)
- x. Recessed soap dishes shall be provided in showers and bathrooms. (1-1-88)
- xi. Handrails shall be provided on both sides of corridors used by patients/residents. A clear distance of one and one-half (1-1/2) inches shall be provided between the handrail and the wall. Ends shall be returned to the wall. (1-1-88)

xii. The arrangement of handwashing facilities shall provide sufficient clearance for blade-type operating handles and shall be installed to permit use by wheelchair patients/residents. (1-1-88)

xiii. Lavatories and handwashing facilities shall be securely anchored to withstand an applied vertical load of not less than two hundred fifty (250) pounds on the front of the fixture. (1-1-88)

xiv. Mirrors shall be arranged for convenient use by patients/residents in wheelchairs as well as by patients/residents in a standing position. (1-1-88)

xv. Paper towel dispensers and waste receptacles shall be provided at all handwashing fixtures. (1-1-88)

xvi. Ceiling heights shall be as follows: (1-1-88) (1) Boiler rooms shall have ceiling clearances not less than two (2) feet, six (6) inches above the main boiler header and connecting piping. (1-1-88) (2) Rooms containing ceiling-mounted equipment shall have height required to accommodate the equipment. (1-1-88) (3) All other rooms shall have not less than eight (8) foot ceilings except that corridors, storage rooms, toilet rooms, and other minor rooms may not have less than seven (7) feet, eight (8) inches. Suspended tracks, rails and pipes located in the path of normal traffic shall not be less than six (6) feet, eight (8) inches above the floor. (1-1-88)

xvii. Recreation rooms, exercise rooms and similar spaces where impact noises may be generated shall not be located directly over patient/resident bed areas unless special provisions are made to minimize the noise. (1-1-88)

xviii. Rooms containing heat producing equipment, such as boiler or heating rooms and laundries, shall be insulated and ventilated to prevent any floor surface located above such rooms from exceeding a temperature of ten degrees (10) Fahrenheit above the ambient room temperature. (1-1-88)

b. Finishes: (1-1-88)

i. Floor materials shall be easily cleaned and have wear resistance appropriate for the location involved. Floors in areas used for food preparation or food assembly shall be water resistant and grease proof. Joints in tile and similar materials in such areas shall be resistant to food acids. In all areas frequently subject to wet cleaning methods or spillage, floor materials shall not be physically affected by germicidal and cleaning solutions. Floors that are subject to traffic while wet (such as shower and bath areas, kitchens, and similar work areas) shall have an impervious nonslip surface. Vinyl asbestos tile is not acceptable for such areas. (1-1-88)

ii. Wall bases in kitchens, soiled workrooms, and other areas which are frequently subject to wet cleaning methods shall be made integral and coved with the floor, tightly sealed within the wall, and constructed without voids that can harbor insects. (1-1-88)

iii. Wall finishes shall be washable and in the immediate area of plumbing fixtures shall be smooth and moisture resistant. Finish, trim and wall and floor construction in dietary and food preparation areas shall be free from spaces that can harbor rodents and insects. (1-1-88)

iv. Floor and wall penetrations by pipes, ducts and conduits shall be tightly sealed to minimize entry of rodents and insects. Joints of structural elements shall be similarly sealed. (1-1-88)

v. Ceilings throughout the facility shall be easily cleanable. Ceilings in the dietary and food preparation areas shall have a finished ceiling covering all overhead piping and duct work. Finished ceilings may be omitted in mechanical and equipment spaces, shops, general storage areas and similar spaces, unless required for fire resistance purposes. (1-1-88)

16. Construction Features. The facility shall be designed and constructed to sustain dead and live loads in accordance with local building codes. All construction shall comply with applicable provisions of the codes and standards as listed in Subsection 121.03 and as follows: (12-31-91)

a. Elevators. All buildings having patient/resident use areas on more than one (1) floor shall have at least one (1) electrical or electrohydraulic elevator. (1-1-88)

b. Mechanical standards. All mechanical installations shall comply with applicable codes and the following: (1-1-88)

i. General. Prior to completion, all mechanical systems shall be tested, balanced, and operated to demonstrate to the owner or representative that the installation and operation conform to the plans and specifications. (1-1-88)

ii. Heating and cooling ventilating systems. (1-1-88) (1) For normal comfort the design temperature for all occupied areas shall provide a minimum of sixty-eight degrees (68) and a maximum of eighty degrees (80) Fahrenheit. (1-1-88) (2) All air supply and air exhaust systems shall be mechanically operated. All fans serving exhaust systems shall be located at the discharge end of the system. (1-1-88)

c. Outdoor air intakes shall be located as far as practical but not less than twenty-five (25) feet from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, plumbing vent stacks, or from areas which may collect vehicular exhaust and other noxious fumes. The bottom of outdoor air intakes serving central systems shall be located as high as practical but not less than six (6) feet above ground level or, if installed above the roof, three (3) feet above roof level. (1-1-88)

d. The bottom of ventilation opening shall not be less than three (3) inches above the floor of any room. (1-1-88)

e. All central ventilation or air-conditioning systems shall be equipped with filters having efficiencies no less than: (1-1-88)

i. Eighty percent (80%) for patient/resident care, treatment, diagnostic, and related areas which may be reduced to thirty-five (35%) for all outdoor air systems. (1-1-88)

ii. Eighty percent (80%) for food preparation areas and laundries. (1-1-88)

iii. Twenty-five percent (25%) for all administrative, bulk storage, and sorted holding areas. (1-1-88)

f. Plumbing standards. All plumbing systems shall be designed to met the following: (1-1-88)

i. Shower bases and tubs shall be provided with nonslip surfaces. (1-1-88)

ii. The water supply system shall be designed to supply water at sufficient pressure to operate all fixtures and equipment during maximum demand periods. (1-1-88)

iii. Vacuum breakers shall be installed on hose bibs, janitors' sinks, bedpan flushing attachments, and on all other fixtures to which hoses or tubing can be attached. (1-1-88)

iv. Water distribution systems shall be arranged to provide hot water at each hot water outlet at all times. Hot water at shower, bathing and handwashing facilities shall not exceed one hundred twenty degrees (120) Fahrenheit. (1-1-88)

v. Hot water heating equipment shall have sufficient capacity to supply water at the temperature and amounts as follows: (1-1-88) (1) Clinical. Six and one-half (6 1/2) gallons per hour per bed at one hundred twenty degrees (120) Fahrenheit. (1-1-88) (2) Dietary. Four (4) gallons per hour per bed at one hundred eighty degrees (180) Fahrenheit. (1-1-88) (3) Laundry. Four and one-half (4 1/2) gallons per hour per bed at one hundred sixty-five degrees (165) Fahrenheit. (1-1-88)

vi. If installed, nonflammable medical gas systems shall comply with the applicable requirements of NFPA Standard 99 and fifty-six degrees Fahrenheit (56 F). (1-1-88)

g. Electrical standards. All electrical installations shall comply with applicable codes and the following: (1-1-88)

i. General. Prior to completion, all electrical installations and systems shall be tested to show that the equipment is installed and operating as planned or specified. (1-1-88)

ii. Switchboards and power panels shall be located in a separate enclosure accessible only to authorized personnel. (1-1-88)

iii. Panel boards serving lighting and appliance circuits shall be located on the same floor as the circuits they serve. (1-1-88)

iv. Lighting: (1-1-88) (1) All spaces occupied by people, machinery and equipment within buildings, approaches to buildings and parking lots shall have lighting. (1-1-88) (2) Patients/residents shall have general lighting and night lighting. A reading light shall be provided for each patient/resident. At least one (1) light fixture for night lighting shall be switched at the entrance to each patient/resident room. All switches for control of lighting in patient/resident areas shall be of the quiet operating type. (1-1-88)

v. Receptacles (convenience outlets): (1-1-88) (1) Patient/resident rooms. Each patient/resident room shall have duplex ground type receptacles as follows: One (1) on each side of the head of each bed; one (1) for television if used; and one (1) on another wall. (1-1-88) (2) Corridors. Duplex receptacles for general use shall be installed

approximately fifty (50) feet apart in all corridors and within twenty-five (25) feet of ends in corridors. (1-1-88)

vi. Equipment installation in special areas. The electrical circuit(s) to fixed or portable equipment in hydrotherapy units shall be provided with five (5) milliampere ground fault interrupters. (1-1-88)

vii. Nurse/staff calling system. A nurse/staff calling system shall be provided as specified in Subsection 121.05.d.xii. (12-31-91) viii. Emergency electrical services. An emergency electrical system shall be provided and installed in accordance with the applicable requirements as specified in the National Electrical Code, 1984 Edition, and NFPA 99, 1984 Edition. The source of supply shall be an on-site fuel-fired generating set.

viii. Emergency electrical services. An emergency electrical system shall be provided and installed in accordance with the applicable requirements as specified in the National Electrical Code, 1984 Edition, and NFPA 99, 1984 Edition. The source of supply shall be an on-site fuel-fired generating set. (1-1-88)