

Joint Committee on Administrative Rules

ADMINISTRATIVE CODE

**TITLE 77: PUBLIC HEALTH
CHAPTER I: DEPARTMENT OF PUBLIC HEALTH
SUBCHAPTER c: LONG-TERM CARE FACILITIES
PART 300 SKILLED NURSING AND INTERMEDIATE CARE FACILITIES CODE
SECTION 300.2810 APPLICABILITY OF THESE STANDARDS**

Section 300.2810 Applicability of these Standards

- a) Applicability of New Construction Requirements
 - 1) These standards shall apply to all new Long-Term Care Facilities and major alterations and additions to existing Long-Term Care Facilities. (Major alterations are those that are not defined as minor alterations in subsection (f) of this Section.) Long-Term Care Facilities contemplating construction shall contact the Health Facilities Planning Board for information concerning the current requirements.
 - 2) Projects for which working drawings and specifications have received final approval by the Department prior to the promulgation of these Standards will only be required to meet those Standards that were in effect at the time that the final approval was given.
- b) When construction is contemplated, either for new buildings or additions or major alterations to existing buildings coming within the scope of these standards, design development drawings and outline specifications shall be submitted to the Department for review. Approval of design development drawings and specifications shall be obtained from the Department prior to starting final working drawings and specifications. Such approval will be based upon compliance with Section 300.2830. Comments or approval will be provided within 30 days of receipt by the Department.
- c) The final working drawings and specifications shall be submitted to the Department for review and approval prior to beginning of construction. For final approval to remain valid, contracts must be signed within one year of the date of final approval. Alternate methods of design development and construction such as fast track shall be acceptable if equivalency can be proved. Comments of approval will be provided within thirty days of receipt by the Department.

- d) Any contract modifications which affect or change the function, design, or purpose of a facility shall be submitted to the Department for approval prior to authorizing the modifications. Such approval will be based upon compliance with Section 300.2830. Comments or approval will be provided within 30 days of receipt by the Department.
- e) The Department shall be notified at least 30 days before construction has been completed. The Department will then complete a final inspection. Deficiencies noted during the final inspection must be completed before occupancy will be allowed.
- f) Minor alterations or remodeling changes which do not affect the structural integrity of the building, which do not change functional operation, which do not affect fire safety, and which do not add beds or facilities over those for which the Long-Term Care Facility is licensed need not be submitted for drawing approval. However, the Health Facilities Planning Board requirements must be met for all alterations and remodeling projects.
- g) No system of water supply, plumbing, sewage, garbage or refuse disposal shall be installed, nor any such existing system materially altered or extended until complete plans and specifications for the installation, alteration or extension have been submitted to the Department and have been reviewed and approved. Such approval will be based upon compliance with Section 300.2820.

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2820 Codes and Standards

- a) Each facility shall comply with the applicable provisions of the following codes and standards. Any incorporation by reference in this Section of federal regulations or of any standards of a nationally recognized organization or association refers to the regulations and standards on the date specified and does not include any editions or amendments subsequent to the date specified.
 - 1) State of Illinois rules
 - A) Illinois Plumbing Code (77 Ill. Adm. Code 890),
Department of Public Health
 - B) Illinois Accessibility Code (71 Ill. Adm. Code 400), Capital
Development Board
 - C) Food Service Sanitation Code (77 Ill. Adm. Code 750),
Department of Public Health

- D) Boiler and Pressure Vessel Safety Code (41 Ill. Adm. Code 120), Office of the State Fire Marshal
- 2) Codes and standards
- A) National Fire Protection Association (NFPA), Standard No. 101: Life Safety Code, 2000 Edition (New Health Care Occupancies), including all appropriate references under Chapter 33, and excluding Chapter 5, Performance Based Options, and all other references to performance based options. NFPA 101A: Alternative Approaches to Life Safety shall not be allowed to establish equivalencies for new construction. In addition to the publications referenced in Chapter 33, the following documents shall be applicable for all long-term care facilities:
 - i) NFPA 17A, Standard for Wet Chemical Extinguishing Systems – 2002 Edition
 - ii) NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection – 1999 Edition
 - iii) NFPA 22, Standard for Water Tanks for Private Fire Protection – 1998 Edition
 - iv) NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances – 2002 Edition
 - v) NFPA 50, Standard for Bulk Oxygen Systems at Consumer Sites – 2001 Edition
 - vi) NFPA 70B, Recommended Practice for Electrical Equipment Maintenance – 2002 Edition
 - vii) NFPA 70E, Standard for Electrical Safety Requirements for Employee Workplaces – 2000 Edition
 - viii) NFPA 80A, Recommended Practice for Protection of Buildings from Exterior Fire Exposures – 2001 Edition

- ix) NFPA 105, Recommended Practice for the Installation of Smoke-Control Door Assemblies – 1999 Edition
 - B) Underwriters' Laboratories, Inc. (UL):
 - i) Fire Resistance Directory (2003 Edition)
 - ii) Building Material Directory (2003 Edition)
 - C) American Society for Testing and Materials (ASTM) International, Standard No. E90-02 (1996), Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
 - D) American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE):
 - i) Handbook of Fundamentals, 2001
 - ii) Handbook of Applications, 1999
 - E) International Building Code (2000)
 - F) American Society of Mechanical Engineers (ASME) International, ANSI/ASME Standard No. A17.1-2000, Safety Code for Elevators and Escalators
- b) In addition to compliance with the standards set forth in this Section, all building codes, ordinances and regulations that are enforced by city, county or other local jurisdictions in which the facility is, or will be, located shall be observed.
 - c) Where no local building code exists, the recommendations of the 2000 Edition of the International Building Code shall apply.
 - d) The local building code or the recommendations of the 2000 Edition of the International Building Code shall apply insofar as such recommendations are not in conflict with the standards set forth in this Part, or with the National Fire Protection Association Standard No. 101: Life Safety Code, 2000.
 - e) Amendments to this Section effective November 15, 2003 supersede all other codes and standards incorporated in this Subpart N.

(Source: Expedited Correction at 28 Ill. Reg. 3528, effective November 15, 2003)

Section 300.2830 Preparation of Drawings and Specifications

- a) The preparation of drawings and specifications shall be executed by or be under the immediate supervision of an architect registered in the State of Illinois:
- b) The first submission shall be the design development drawings indicating in detail the assignment of all spaces, size or areas and rooms, and indicating in outline, the fixed and movable equipment and furniture, and the outline specifications.
- c) The plans shall be drawn at a scale sufficiently large to clearly present the proposed design.
- d) The drawings shall include:
 - 1) a plan of each floor including the basement or ground floor,
 - 2) roof plan,
 - 3) plot plan showing roads, parking areas, and sidewalks,
 - 4) elevations of all facades,
 - 5) sections through the building,
 - 6) identification of all fire and smoke compartmentation.
- e) Outline specifications shall provide a general description of the construction including finishes; acoustical material, floor covering; heating and ventilating systems; description of the electrical system including the emergency electrical system and the type of elevators.
- f) The total gross floor area and bed count shall be shown on the drawings.
- g) A brief narrative of the proposed program shall be submitted with the preliminary drawings and outline specifications.
- h) Following approval of the design development drawings and the outline specifications, working drawings and specifications shall be submitted. All working drawings shall be well prepared and clean and distinct prints shall be submitted. Drawings shall be accurately dimensioned and include all necessary explanatory notes, schedules and legends. Working drawings shall be complete and adequate for contract purposes. Drawings shall be prepared for each of the following branches of work: Architectural, Structural, Mechanical, Electrical and Plumbing.

- 1) The architectural drawings shall show:
 - A) Site plan showing all topography, newly established levels and grades, existing structures on the site (if any), new buildings and structures, roadways, walks, and the extent of the areas to be landscaped. All structures which are to be removed under the construction contract shall be shown.
 - B) Plan of each floor and roof.
 - C) Elevation of each facade.
 - D) Sections through building.
 - E) Elevators and dumbwaiters drawings delineating shaft details and dimensions, sizes of cab platforms and doors, travel distances including elevation height of landings, pit sizes, and machine rooms.
 - F) Kitchen, laundry, clean and soiled utility room, special care areas, and similar areas detailed at a scale to show the locations, type, size and connection of all fixed and movable equipment.
 - G) Scale details as necessary at a scale sufficiently large to properly indicate details of the work.
 - H) Schedule of finishes.
- 2) The structural drawings shall show:
 - A) Plans of foundations, floors, roofs and all intermediate levels shall show the complete design with sizes, sections, and the relative location of the various members including:
 - B) Schedule of beams, girders and columns.
 - C) Notes on design data including the name of the governing building code, values of allowable unit stresses, assumed live loads, wind loads, earthquake load, and soil bearing pressures.
 - D) Details of special connections, openings, pipe sleeves and expansion joints.

- E) Special structures shall include calculations defining load assumption, shear and moment diagrams and horizontal and vertical reactions.
- 3) Mechanical drawings with specifications shall show the complete heating, cooling and ventilation systems; plumbing, drainage, stand pipe, and sprinkler systems.
- A) Heating, Cooling and Ventilation.
 - i) Pumps, tanks, boilers and piping and boiler room accessories.
 - ii) Air conditioning systems with required equipment, water and refrigerant piping, and ducts.
 - iii) Supply and exhaust ventilating systems with connections and piping.
 - iv) Air quantities for all rooms including supply and exhaust ventilating duct openings.
 - B) Plumbing, Drainage and Stand Pipe Systems.
 - i) Size and elevation of: street sewer, house sewer, house drains, street water main and water service into the building.
 - ii) Location and size of soil, waste, and vent stacks with connections to house drains, cleanouts, fixtures and equipment.
 - iii) Size and location of hot, cold and circulating mains, branches, and risers from the service entrance, and tanks.
 - iv) Riser diagram of all plumbing stacks with vents, water risers and fixture connections.
 - v) Gas, oxygen and similar piped systems.
 - vi) Stand pipe and sprinkler systems.
 - vii) All fixtures and equipment that require water and drain connections.

- 4) Electrical drawings shall show all electrical wiring, outlets, and equipment which require electrical connections.
 - A) Electrical service entrance with switches and feeders to the public service feeders, characteristics of the light and power current, transformers and their connections.
 - B) Location of main switchboard, power panels, light panels and equipment. Feeder and conduit sizes shall be shown with schedule of feeder breakers or switches.
 - C) Light outlets, receptacles, switches, power outlets, and circuits.
 - D) Telephone layout showing service entrance, telephone switchboard, strip boxes, telephone outlets and branch conduits as approved by the telephone company. Where public telephones are used for inter-communication, provide separate room and conduits for racks and automatic switching equipment as required by the telephone company.
 - E) Nurses' call systems with outlets for beds, duty stations, corridor signal lights, annunciators and wiring diagrams.
 - F) Fire alarm system with stations, signal devices, control board and wiring diagrams.
 - G) Emergency electrical system with outlets, transfer switch, source of supply, feeders, and circuits.
 - H) All other electrically operated systems and equipment.
- 5) When the project is an addition, details and information on the existing building shall be provided as follows:
 - A) Type of activities within the existing building and distribution of existing beds.
 - B) Type of construction of existing building and number of stories in height.
 - C) Plans and details showing attachment of new construction to the existing structure.

- D) Mechanical and Electrical systems showing connections to the existing system.
 - E) The Department may require submission of drawings of all or any part of the existing structure, depending upon the extent of the modification.
- 6) Specifications shall supplement the drawings and shall: Describe, except where fully indicated and described on the drawings, the materials, workmanship, kind, sizes, capacities, finishes, and other characteristics of all materials, products, articles and devices.

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2840 Site

- a) The facility shall be located on a reasonably flat or rolling, well drained site that is not subject to flooding; reasonably free from sources of excessive noise, noxious or hazardous smoke or fumes; not in deteriorated, unpleasant, or potentially hazardous area; and not near uncontrolled sources of insect and rodent breeding.
- b) The facility shall be located so that the building or buildings can comply with all applicable local zoning ordinances, building restrictions and fire safety requirements. The Department may have additional requirements if the proposed locations of the building or buildings on the site would result in a hazard to or be detrimental to the health, welfare, or safety of the residents in the facility. These additional requirements shall include, but are not limited to fences, stairs, and other types of barriers to prevent residents from injury.
- c) The facility shall be served by a potable water supply with water pressure and volume that is acceptable to the Department. (B)
- d) The distance from the fire station, the accessibility of the facility, and capability of the fire department must be approved in writing by the Office of the State Fire Marshal. (B)
- e) The facility shall have at least one municipal or private fire hydrant, located within 300 feet of every point on the perimeter of the building and satisfactory for use by the equipment of the fire department serving the building, or have an acceptable equivalent. Additional hydrants may be required if needed to properly protect the residents from fire hazards. Evaluation and written approval must be obtained from the Office of the State Fire Marshal. (B)

- f) Plans showing the proposed building location must be submitted to the Illinois Department of Transportation, Division of Water Resources to determine compliance with the State Flood Plain Regulations and Executive Order IV, 1979.

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2850 Administration and Public Areas

- a) Facilities for the physically handicapped (public, staff and residents) shall be provided in administration and public areas as well as in resident areas.
- b) Lobby shall include a reception and information counter or desk, waiting space, and public telephones. See Illinois Plumbing Code for drinking fountains and toilet facilities requirements for staff and visitors.
- c) General or Individual Office shall have sufficient space to accommodate the following functions: Administrative, Business/Financial Transactions, Professional Staff (Director of Nursing, Food Service Supervisor, Activity Director, Social Service Director), and Professional Consultants (Medical Director, Pharmacist, Dietitian, Social Worker).
- d) Multipurpose room shall be provided for conferences, meetings, interviews, and educational purposes.
- e) Provide adequate space for recording, reviewing and storing resident records.

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2860 Nursing Unit

- a) The number of resident beds in a nursing unit shall not exceed 75 beds.
 - 1) Not less than 60 percent of the resident beds shall be in one or two bed rooms.
 - 2) Not less than three percent of the total number of the beds in the facility shall be located in single bed rooms with a private bath, water closet and lavatory.
- b) General Requirements for Bedrooms

- 1) Resident bedrooms shall have an entrance directly off a corridor with an entrance door which swings into the room.
 - 2) Resident bedrooms shall have adequate and satisfactory artificial light and be equipped in accordance with Section 300.2940(a)2) and (e)(1).
 - 3) Residents shall have access to a toilet room without entering the general corridor area.
 - 4) The facility shall provide a closet or wardrobe of at least four square feet for each resident.
 - 5) Resident bedroom floors shall be at or above grade level.
 - 6) Each room used as a resident bedroom shall have at least one outside window, and a total window area to the outside equal to at least one-tenth the floor area of the room.
 - 7) A nurses' call system shall be provided in accordance with Section 300.2940(g). (B)
 - 8) Complete visual privacy shall be provided for each resident in multibed rooms. Design for privacy shall not restrict resident access to the entry, lavatory, nor toilet.
 - 9) No resident bedroom shall be located more than 120 feet from the nurses' station, clean utility room, and soiled utility room.
- c) Resident Bedrooms
- 1) Single resident bedrooms shall contain at least 100 square feet. Multiple resident bedrooms shall contain at least 80 square feet per bed. Minimum usable floor area shall be exclusive of toilet rooms, closets, lockers, wardrobes, alcoves, vestibules, or clearly definable entryways.
 - 2) Multiple resident bedrooms shall not have more than four beds nor more than three beds deep from an outside wall. All beds shall have a minimum clearance of three feet at the foot and sides of the bed.
- d) Special Care Room
- 1) The facility shall provide a special care room for each nursing unit.

- 2) This room shall be provided with a private toilet room containing water closet, lavatory, bathtub or shower and all other necessary facilities to meet the resident's needs. (B)
 - 3) This room shall be located to allow direct visual supervision from the nurses' station.
 - 4) This room shall be included in the authorized maximum bed capacity for the facility.
 - 5) It is permissible for the room to be occupied by a resident, not in need of special care, provided the resident is clearly informed and understands he or she will be immediately transferred out of the room any time of day or night, whenever the room is needed to care for a resident requiring special care.
- e) Nurses' Station (B)
- 1) The facility shall provide a minimum of one nursing station per unit with direct access to the corridor for each nursing unit. The location of this station shall allow visual control without the use of mirrors of each resident sleeping corridor. Separation shall be provided from the utility rooms.
 - 2) One or more nursing units may be combined at a central nursing station if sufficient space is provided for all nursing functions.
 - 3) A lounge with toilet room shall be provided near each station for nursing staff. Lockers for safekeeping of coats and personal effects may be provided within this space or in a convenient central location.
- f) Bath and Toilet Rooms
- 1) The resident bedroom toilet room shall serve no more than two resident rooms nor more than eight beds. The toilet room shall contain a water closet and a lavatory. The lavatory may be omitted from the toilet room when the resident room contains a lavatory.
 - 2) The facility shall provide one wheelchair resident toilet room for each sex residing in a nursing unit. The room shall be accessible from the corridor. This room shall contain a water closet and lavatory.
 - 3) Wheelchair resident toilet rooms are not required when all resident toilet rooms can accommodate wheelchair residents.

- 4) The facility shall provide one training toilet room on each nursing floor, which is accessible from the corridor. Three-foot clearance at the front and both sides of the water closet shall be provided. This room shall contain a lavatory accessible for wheelchair use.
- 5) The facility shall provide one bathtub or shower for each ten resident beds per nursing unit which are not served by bathing or showering facilities in resident rooms.
- 6) All shower stalls for residents not needing assistance shall be at least three feet square and shall have no curb.
- 7) The facility shall provide at least one bathtub for assisted bathing per nursing unit. There shall be a clear area at least three feet wide at both sides and one end of the tub.
- 8) The facility shall provide at least one shower stall for assisted showering per nursing unit. The shower stall shall be at least four feet square with no curb.
- 9) The facility shall provide a toilet room with a water closet and lavatory, accessible to the assisted bathtub and shower without entering the general corridor. This room may be arranged to serve as the training toilet facility.
- 10) Grouped bathing and toilet facilities shall be partitioned or curtained for privacy.

g) Utility Rooms

- 1) The clean utility room shall have direct access to a corridor or access may be through the nurses' station entrance. This room shall contain work counters, single or double compartment sink with integral drainboard, storage cabinets, and an autoclave. (Autoclave may be waived in lieu of other methods if sterilization is approved by Department.)
- 2) A clean linen storage room or closet within the clean utility room shall be provided. If a closed cart system is used, storage may be in an alcove.
- 3) The soiled utility room shall have direct access to a corridor. This room shall contain work counters, storage cabinets, and a clinical rim flush sink. The room shall also contain a three compartment sink with integral drainboard if chemical sanitizing procedures are

used, or a double compartment sink with integral drainboard if a utensil sanitizer is used (See Section 300.2430).

- 4) The charging room for a linen chute shall be large enough to unload the collecting cart with the door closed.

h) Medication Facilities

- 1) A medication station shall be provided for convenient and prompt 24 hour distribution of medicine to residents. The medicine preparation room shall be under the nursing staff's visual control and contain a work counter, refrigerator, and locked storage for biologicals and drugs. A sink for handwashing and preparation of medication shall be provided in the medication preparation room.
- 2) If medicine dispensing carts are used, a specific storage space for the cart shall be provided, which may be located in the nurses' station or in an alcove or other space under the direct control of the nursing staff. A sink for handwashing and preparation of medication shall be provided in the nurses' station.

- i) A nourishment station shall be provided with a handwashing sink and equipment including refrigerator, and storage cabinets for serving nourishment between scheduled meals. Ice for residents' use shall be provided only by icemaker dispenser units.
- j) A room for examination and treatment of residents shall be provided and shall have a minimum floor area of 100 square feet, excluding space for vestibule, closets and work counters (whether fixed or movable). The minimum room dimension shall be ten feet. The room shall contain a lavatory or sink equipped for handwashing; a work counter; storage facilities; and a desk, counter, or shelf space for writing.
- k) An equipment storage room shall be provided for storage of equipment such as I.V. stands, inhalators, air mattresses, walkers, and wheelchairs.
- l) Parking space for wheelchairs shall be provided and located out of path of normal traffic.

(Source: Amended at 18 Ill. Reg. 1491, effective January 14, 1994)

Section 300.2870 Dining, Living, Activities Rooms

- a) The combined area of these rooms shall not be less than 25 square feet per resident bed.

- b) Provide a minimum of one dining room with at least ten square feet per resident bed. Provide facilities to allow individual feeding of residents on their sleeping floor if they are not able to feed themselves. Dining area provided for this function may be included in the required area.
- c) Provide a minimum of one comfortably furnished living room on each floor in multiple story buildings having a total window area of at least one-tenth the floor area.
- d) Provide activities room based on program requirements. This room may be combined with the living or dining room.
- e) Locate these rooms so that they are not an entrance vestibule from the outside.

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2880 Therapy and Personal Care

- a) Physical and occupational therapy facilities shall be provided as may be required by Section 300.1420.
- b) A separate room shall be provided with appropriate equipment for hair care and grooming needs of the residents.

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2890 Service Departments

- a) Dietary facilities shall comply with the Department's rules entitled "Food Service Sanitation" (77 Ill. Adm. Code 750) Food service facilities shall be designed and equipped to meet the requirements of the Narrative Program. These may consist of an on-site conventional food preparing system, a convenience food service system, or an appropriate combination of the two. (B)
- b) The kitchen, consisting of food preparation, cooking and serving areas, shall be approximately ten square feet per resident bed with a minimum area of at least 200 square feet. It shall be properly located for efficient food service, and be large enough to accommodate the equipment and personnel needed to prepare and serve the number of meals required. (B)
- c) The following facilities shall be provided as required to implement the type of food service selected:
 - 1) A control station shall be provided for receiving food supplies.

- 2) Storage space shall be adequate to provide normal and emergency supply needs, approximately two and one half square feet per patient bed, for bulk and daily food storage, located in a room convenient to the kitchen.
- 3) Food Preparation Facilities Conventional food preparation systems require space and baking. Convenience food service systems such as frozen prepared meals, bulk packaged entrees, and individual packaged portions, or systems using contractual commissary service require space and equipment for thawing, portioning, heating, cooking, or baking.
- 4) Handwashing facilities shall be located in the food preparation area.
- 5) Residents' meal service facilities shall be provided as required for tray assembly and distribution.
- 6) Warewashing space shall be located in a room or an alcove separate from food preparation and serving areas. Commercial type dishwashing equipment shall be provided. Space shall also be provided for receiving, scraping, sorting, stacking and loading soiled tableware and for transferring clean tableware to the using areas. A handwashing lavatory shall be provided. (B)
- 7) Potwashing facilities shall be located conveniently for washing and sanitizing cooking utensils. (B)
- 8) Storage areas shall be provided for cans, carts, and mobile tray conveyors.
- 9) Waste storage facilities shall be located in a separate room easily accessible to the outside for direct pickup or disposal.
- 10) An office or desk space shall be provided for the dietitian or dietary service manager.
- 11) Toilets shall be accessible to the dietary staff. Handwashing facilities shall be immediately available.
- 12) A janitors' closet for the exclusive use of the food preparation areas shall be located within the dietary department. It shall contain a floor receptor or service sink and storage space for housekeeping equipment and supplies.

- 13) Self-dispensing icemaking facilities shall be provided.
 - 14) Provide adequate can, cart and mobile tray washing facilities as required.
- d) Linen Service
- 1) Provide a laundry room with commercial type equipment designed to meet the needs of the facility unless a commercial laundry service is used.
 - 2) The laundry facilities shall be designed to provide for the processing of linens from soiled linen receiving/sorting through washing, through drying, through clean linen inspection, folding and storage, maintaining a separation between soiled and clean functions.
 - 3) Provide for the storage of laundry supplies and carts.
 - 4) If washers and dryers are provided for personal use of residents, they shall be located in a room separate from the facility's laundry room.
- e) Housekeeping and Storage
- 1) Sufficient janitor's closets shall be provided throughout the facility as required to maintain a clean and sanitary environment. Each shall contain a floor receptor or service sink and storage space for housekeeping equipment and supplies. Space for large housekeeping equipment and for back-up supplies may be centrally located.
 - 2) Provide a total area of approximately ten square feet per resident bed for the storage areas designated in this service department. This does not include closets or wardrobes in residents' rooms. Separate storage space with provisions for locking and security control shall be provided for residents' personal effects which are not kept in residents' bedroom.
 - 3) Provide storage rooms for maintenance supplies, and yard equipment.

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2900 General Building Requirements

a) Elevators

- 1) Have a minimum of one elevator in all buildings of two or more stories in height. The basement shall be considered as one story if it is used by residents. (B)
- 2) If 80 to 200 beds are located above the first floor, at least one additional elevator shall be provided.
- 3) For facilities with more than 200 beds, the number of elevators shall be determined from a study of the use requirements and the estimated vertical transportation requirements.
- 4) A minimum of one car shall be of institutional type having inside dimensions that will accommodate a stretcher and attendants and shall be at least five feet by seven feet, six inches. The car door shall have a clear opening of not less than three feet, eight inches.
- 5) Elevators shall be equipped with an automatic leveling device of the two-way automatic maintaining type.
- 6) Elevator controls, alarm buttons, and telephones shall be accessible to physically handicapped in accordance with Capital Development Board rules entitled "Illinois Accessibility Code" (77 Ill. Adm. Code 400).
- 7) Elevator call buttons, controls, and door safety stops shall be of a type that will not be activated by heat or smoke. (B)
- 8) Elevators, except freight elevators, shall be equipped with a two-way special service key operated switch to permit cars to bypass all landing button calls and be dispatched directly to any floor. (B)
- 9) Fireman's emergency operations shall be furnished in accordance with American National Standards Institute Standard A17.1 Elevator Safety Code. (B)
- 10) Inspections and tests shall be made and written certification be furnished that the installation meets the requirements set forth in this section and all applicable safety regulations and codes. (B)

b) Handrails and Grab Bars

- 1) Handrails shall be provided on both sides of all corridors and ramps used by residents. (B)

- 2) Handrails shall be provided on all sides of an elevator cab not provided with a door. (B)
 - 3) Handrails on stairs used by residents shall be provided on both sides of the stairs including the platforms and landings. (B)
 - 4) Handrail dimensions and details shall conform to the Capital Development Board rules entitled "Illinois Accessibility Code" (71 Ill. Adm. Code 400). It is recommended that handrails be installed at a height of 32 inches measured vertically from the floor surface. (B)
 - 5) Grab bars shall be provided for all resident use toilets, showers, and tubs. (B)
 - 6) The ends of handrails and grab bars shall return to the wall. (B)
- c) Ceiling Heights
- 1) All rooms occupied or used by residents shall have ceilings not less than eight feet.
 - 2) Corridors, storage rooms, toilet rooms and other minor rooms shall have ceilings not less than seven feet, eight inches.
 - 3) Suspended tracks, rails and pipes located in the path of traffic shall be no less than six feet eight inches above the floor.
 - 4) Boiler room shall have ceiling clearances not less than two feet six inches above the main boiler header and connecting piping.
- d) Doors and Windows
- 1) Main entrance and all exit doors shall swing outward and be provided with door closers and panic hardware. (B)
 - 2) All exterior doors shall be equipped with a signal that will alert the staff if a resident leaves the building. Any exterior door that is supervised during certain periods may have a disconnect device for part-time use. If there is constant 24 hour a day supervision of the door, a signal is not required. (B)
 - 3) Locks installed on resident bedroom doors shall be so arranged that they can be quickly and easily unlocked from the corridor side. All such locks shall be arranged to permit exit from the room by a simple operation without the use of a key. The door may be

lockable by the occupant if the door can be unlocked from the corridor side and keys are carried by the staff at all times. (B)

- 4) Resident toilet rooms shall open directly into a corridor or into a resident bedroom. (B)
- 5) The doors for the toilet rooms used by residents shall have a minimum door width of three feet. (B)
- 6) No toilet or bathroom door shall be provided with hardware which could allow a resident to become locked in the room. All toilet or bathroom doors and hardware shall be designed to permit emergency egress to the room. (B)
- 7) Doors and windows shall fit snugly and be weather tight, yet open and close easily.
- 8) Outside doors, other than required exits, and operable windows shall be equipped with tight-fitting, 16 mesh screens. Screen doors shall be equipped with self-closing devices.
- 9) All doors to resident's sleeping rooms shall be provided with automatic closers actuated by smoke detectors in the resident room. The doors shall normally be free swinging in the open and close directions, and be designed so they will remain in any position except when they are actuated by the detector. They shall then close gently and shall latch when closed. When so actuated they shall automatically close again if opened manually. Each door shall be equipped with a light mounted on the wall adjacent to the door. The light shall illuminate if the door has been closed as a result of the actuation of the controlling smoke detector. Each door closer will be activated only when its own detector annunciates a fire. In addition, a centrally located monitor shall contain signals which identify the resident room in which the smoke detector has signaled the alarm. The system shall be wired into the fire alarm system. (B)

e) Floors

- 1) Floors shall be smooth, free from cracks and finished so that they can be easily and properly cleaned. Floors shall be covered wall to wall with water resistant material in wet areas including but not limited to bathrooms, kitchens, utility rooms. (B)
- 2) Thresholds and expansion joints shall be flush with the floor to facilitate use of wheelchairs and carts.

- f) Mirrors shall be installed above all lavatories except handwashing lavatories in food preparation areas, or in clean and sterile supply areas or at nurses handwashing sink.
- g) Provide paper towel dispensers and waste receptacles or electric hand dryers at all lavatories.
- h) Rooms containing heat-producing equipment (such as boiler or heater rooms and laundry rooms) shall be insulated and ventilated to prevent any floor surface above from exceeding a temperature of 10°F above the ambient room temperature.
- i) Sound Transmission Limitation
 - 1) Recreation rooms and exercise rooms, and similar spaces where impact noises may be generated, shall not be located directly over resident bed areas unless special provisions are made to minimize such noise.
 - 2) Sound transmission limitations shown in Table A shall apply to partitions, floors, and ceiling construction in resident areas.
- j) Hazardous Areas, Fire Extinguishers and Miscellaneous
 - 1) Interior finish flame spread ratings shall be in accordance with the National Fire Protection Association, Life Safety Code Standard 101, Standards for Flame Spread and Smoke Emission Ratings. (B)
 - 2) There shall be at least one approved fire extinguisher in all basements, furnace rooms, and kitchens, laundry rooms and beauty shops. In addition, there shall be on each floor of the building, extinguishers located so a person will not have to travel more than 50 feet from any point to reach one. They shall be inspected annually and recharged when necessary. The date of checking and recharging shall be recorded on a tag attached to the extinguisher. (B)
 - 3) Approved containers with proper covers shall be provided for daily storage of rubbish. (B)
 - 4) Housekeeping throughout the building, including basements, attics, and unoccupied rooms shall be adequately performed to minimize all fire hazards. (B)

- 5) Comply with any reasonable additional fire protection measures recommended by the Department over and above these requirements or the Office of the State Fire Marshal if conditions in and around building, including its location, indicate that such additional protection is needed. Additional fire protection measures shall include, but are not limited to the institution of a fire watch, installation of a sprinkler system, and installation of smoke detectors. (B)
- k) Have no other business not related to health care conducted in the building that constitutes a hazard or annoyance to the residents. In any case, the business shall be in a segregated portion of the building and shall have a separate entrance. (A, B)

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2910 Structural

- a) General Design Requirements
 - 1) The buildings and all parts thereof shall be of sufficient strength to support all dead, live, and lateral loads without exceeding the working stresses permitted for the materials of their construction in generally accepted good engineering practice. (B)
 - 2) Special provision shall be made for loads which have a greater load than the specified minimum live load, including partitions which are subject to change of location. (B)
- b) Construction shall be in accordance with the requirements of National Fire Protection Association Standard 101, Life Safety Code, and the minimum requirements contained herein. (A, B)
 - 1) Foundations shall rest on natural solid ground and shall be carried to a depth of not less than one foot below the estimated frost line or shall rest on leveled rock or load-bearing piles or caissons when solid ground is not encountered. Footings, piers, and foundation walls shall be adequately protected against deterioration from the action of ground water. It is recommended that soil test borings be taken to establish proper soil-bearing values for the soil at the building site.
 - 2) Assumed live loads shall be in accordance with the International Conference Building Officials Uniform Building Code.

- 3) The fire resistance rating of the structural members shall be as established by National Fire Protection Association Standard 220 (Standard Types of Building Construction).
- c) Provisions for Natural Disasters (B)
- 1) Earthquakes: In regions where local experience shows that earthquakes have caused loss of life or extensive property damage, buildings and structures shall be designed to withstand the force assumptions specified in the International Conference Building Officials Uniform Building Code. Seismic zones are identified on the attached map. (B)
 - 2) Tornadoes and Floods: Special provisions shall be made in the design of buildings, including structural design, in regions where local experience shows loss of life or damage to buildings resulting from hurricanes, tornadoes, or floods. (B)

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)

Section 300.2920 Mechanical Systems

- a) General Requirements
- 1) Mechanical systems shall be tested, balanced, and operated to demonstrate that the installation and performance of these systems conform to the requirements of these standards.
 - 2) Upon the completion of the contract, the owner shall be furnished with a complete set of manufacturer's operating and preventative maintenance instructions, parts list with numbers and descriptions for each piece of equipment and a copy of the air-balance report. A complete set of these documents shall be kept on the premises.
 - 3) The owner shall be provided with instructions in the operational use of the systems and equipment as required.
- b) Thermal and Acoustical Insulation
- 1) Insulation shall be provided for the following:
 - 2) Boilers, smoke breeching, and stacks.
 - 3) Steam supply and condensate return piping. (B)

- 4) Hot water piping above 180 degrees Fahrenheit and all hot water heaters, generators, and convertors.
- 5) Hot water piping above 125 degrees Fahrenheit which is exposed to contact by residents. (B)
- 6) Chilled water, refrigerant, other process piping and equipment operating with fluid temperatures below ambient dew point.
- 7) Water supply and drainage piping on which condensate may occur.
- 8) Air ducts and casings with outside surface temperatures below ambient dew point.
- 9) Other piping, ducts, and equipment as necessary to maintain the efficiency of the system.
- 10) Insulation may be omitted from hot water and steam condensate piping not subject to contact by residents when such insulation is not necessary for preventing excessive system heat loss or excessive heat gain.
- 11) Insulation including finishes and adhesives on exterior surfaces of ducts, pipes, and equipment shall have a flame spread rating of 25 or less and a smoke developed rating of 150 or less as determined by an independent testing laboratory in accordance with American Society Testing Materials Standard E84. (B)

Exception: Duct, pipe and equipment coverings shall not be required to meet these requirements where they are located entirely outside of a building, or do not penetrate a wall or roof or do not create an exposure hazard.

- 12) Access for filter changing shall be provided within equipment rooms.
- c) Steam and Hot Water Systems. Supply and return mains and risers for cooling, heating and process steam systems shall be valved to isolate the various sections of each system. Each piece of equipment shall be valved at the supply and return ends.
 - d) Thermal Hazards. Any surface exceeding a temperature of 140 degrees Fahrenheit (such as radiators, hot water or steam pipes, baseboard heaters, or therapy equipment) that is accessible to residents shall be provided with partitions, screens, shields, or other means to protect residents from injury. Any protective device shall be designed and installed so that it

does not present a fire or safety hazard or adversely affect the safe operation of the equipment.

e) Heating, Cooling, and Ventilating Systems

- 1) A design temperature of 75 degrees Fahrenheit for both summer and winter design conditions shall be provided for all resident use areas including corridors.
- 2) All ventilation supply, return and exhaust systems shall be mechanically operated.
- 3) Outdoor air intakes shall be located as far as practical but not less than 15 feet from the exhaust outlets of ventilation systems, combustion equipment stacks, 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 feet above ground level, or if installed above the roof, three feet above roof level.
- 4) The ventilation systems shall be designed and balanced to provide the pressure relationships and ventilation rates as shown in Table B. (B)
- 5) A manometer shall be installed across each filter bed serving central air systems.
- 6) Air conditioning and ventilation systems shall be designed, installed and maintained as required by National Fire Protection Association Standard 90A. (A, B)
- 7) The hood and duct system for cooking equipment used in processes producing smoke or grease-laden vapors shall be in conformance with National Fire Protection Association Standard 96. That portion of the fire extinguishment system required for protection of the duct system may be omitted when all cooking equipment is served by a grease extractor listed by Underwriter's Laboratory or other independent testing laboratories. (A, B)
- 8) The ventilation of the medical gas storage room shall conform to the requirements of National Fire Protection Association Standard 56A "Inhalation Anesthetics" including the gravity option system. (B)
- 9) Boiler rooms and other rooms having combustion equipment shall be provided with sufficient outdoor air to maintain combustion

rates of equipment and limit temperatures to 97 degrees Fahrenheit. Effective Temperature as defined by American Society Heating Refrigeration Engineers Handbook of Fundamentals. (A, B)

- 10) Rooms containing heat producing equipment, such as boiler rooms, heater rooms, food preparation centers, laundries, and sterilizer rooms shall be insulated and ventilated to prevent any floor surface above from exceeding a temperature of 10 degrees Fahrenheit above the ambient temperature. The ventilation rates shown in Table B shall be considered as minimum acceptable rates and shall not be construed as precluding the use of higher ventilation rates.

(Source: Amended at 14 Ill. Reg. 14950, effective October 1, 1990)

Section 300.2930 Plumbing Systems

- a) **General Requirements.** 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)
- 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 for nursing staff and food handlers' handwashing, shall be mounted so that its discharge point is a minimum distance of five inches above the rim of the fixture. (B)
 - 3) Handwashing lavatories used by nursing staff and food handlers shall be trimmed with valves which 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 potwashing sink shall be a three compartment sink with one compartment at least 14 inches deep.

- 6) Shower bases and tub bottoms shall be designed with nonslip surfaces. (B)
- 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 100 degrees Fahrenheit at each hot water outlet at all times.
 - 5) Hot water available to residents at shower, bathing and handwashing facilities shall not exceed 110 degrees Fahrenheit. (A, B)
 - 6) Each hot water system serving resident areas shall include at least one of the following equipment requirements to insure that the water temperature does not exceed 110 degrees Fahrenheit:
 - A) A thermostatically controlled mixing valve, or
 - B) An aquastat which limits the water temperature in the water heater to a maximum temperature of 110 degrees Fahrenheit and a solenoid operated shut off valve activated by a sensing element in the water line which shuts off the water and activates an alarm at the nurses station when the water temperature exceeds 110 degrees Fahrenheit. (A, B)
- d) Hot Water Heaters and Tanks
- 1) Capacity and Temperature Requirements
 - A) The hot 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	6½	4	4½
Temperature (degrees Fahrenheit)	110	140*	180

*180 degrees Fahrenheit 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 nor 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. (B)
 - f) Nonflammable Gas Systems. Nonflammable medical gas systems if installed shall be in accordance with the requirements of National Fire Protection Association Standards 56A and 56F. (B)
 - g) Clinical Vacuum (Suction) Systems. Clinical vacuum systems if installed shall be in accordance with the requirements of the Compressed Gas Association Pamphlet P-2.1. (B)
 - h) Fire Extinguishing Systems
 - 1) A complete automatic sprinkler system shall be installed throughout all facilities regardless of construction type. (A, B)
 - 2) All sprinkler and other fire extinguishing systems shall be designed and installed in accordance with National Fire Protection Association Standard 101 and referenced codes. (A, B)
 - 3) All sprinkler systems shall be maintained in accordance with National Fire Protection Association Standard 13A. (A, B)

(Source: Amended at 14 Ill. Reg. 14950, effective October 1, 1990)

Section 300.2940 Electrical Systems

- a) General Requirements
 - 1) All material including equipment, conductors, controls, and signaling devices shall be installed to provide a complete electrical system with the necessary characteristics and capacity to supply the electrical facilities required by these standards. All materials shall be listed as complying with available standards of Underwriters' Laboratories, Inc. or other similarly established standards. (B)
 - 2) All electrical installations and systems shall be tested to show that the equipment is installed and operates as planned or specified and be in accordance with these standards. (A, B)
 - 3) The installation shall meet all the requirements of the latest "National Electrical Code". (A, B)
- b) Switchboards and Power Panels. Circuit breakers or fusible switches that provide disconnecting means and overcurrent protection for conductors connected to switchboards and panelboards shall be enclosed or guarded to provide a dead-front type of assembly. The main switchboard shall be located in a separate enclosure accessible only to authorized persons. The switchboard shall be convenient for use, readily accessible for maintenance, clear of traffic lanes, and in a dry ventilated space free of corrosive fumes or gases. Overload protective devices shall be suitable for operating properly in ambient temperature conditions.
- c) Panelboards. Panelboards serving lighting and appliance circuits shall be located on the same floor as the circuits they serve. This requirement does not apply to emergency system circuits.
- d) Lighting
 - 1) All spaces occupied by people, machinery, and equipment within buildings, approaches to and exits from buildings, and parking lots shall have lighting.
 - 2) Resident's rooms shall have general lighting. A reading light shall be provided for each resident. At least one light fixture shall be switched at the entrance to each resident room. All switches for control of lighting in resident's sleeping areas shall be of the quiet operating type.
- e) Receptacles (Convenience Outlets)

- 1) Each resident bed room shall have duplex grounding type receptacles as follows: One located each side of the head of each bed; one for television if used; and one on another wall. Receptacles are to be located between 12 to 30 inches above the finished floor. (B)
 - 2) Resident bathrooms shall have at least one duplex receptacle.
 - 3) See Article 517 of National Fire Protection Association Standard 70 for grounding requirements.
 - 4) Duplex receptacles shall be installed approximately 50 feet apart in all corridors and within 25 feet of ends of corridors.
- f) **Door Alarm System**
Each exterior door shall be equipped with a signal that will alert staff if a resident leaves the building. Any exterior door that is supervised during certain periods may have a disconnect device for part-time use. If there is constant 24 hour a day supervision of the door, a signal is not required. (B)
- g) **Nurses' Calling System**
- 1) Each resident room shall be served by at least one calling station and each bed shall be provided with a call station. One call station may serve two adjacent beds. Call shall register at the nurses' station and shall activate a visible signal in the corridor at the resident's door, and in the nurse's station. In multicorridor nursing units, additional visible signals shall be installed at corridor intersections. In rooms containing two or more calling stations, identifying lights shall be provided at the nurse's station. (B)
 - 2) A nurses' call station shall be provided for residents' use at each resident's toilet, bath, and shower location. The cord shall be long enough to reach within six inches of the floor. (B)
- h) **Fire Alarm System**
- 1) A manually and automatically operated fire alarm system shall be installed. (A, B)
 - 2) Automatic smoke detectors shall be installed in all resident sleeping rooms and at 30 feet on center in all corridors other than sleeping area corridors. (A, B)
- i) **Emergency Electrical System**

- 1) To provide electricity during an interruption of the normal electric supply, an emergency source of electricity shall be provided and connected to certain circuits for lighting and power. The emergency system shall consist of the life safety branch and the critical branch. (B)
- 2) The source of this emergency electrical service shall be an emergency generating set or an approved dual source of normal power. (B)
- 3) Life Safety Branch, Automatic Transfer ten Seconds.
 - A) Illumination of means of egress as necessary for corridors, passageways, stairways, landings and exit doors, and all ways of approach to and through exits. (A, B)
 - B) Exit signs and exit directional signs. (A, B)
 - C) Sufficient lighting in dining room and recreation areas to provide illumination to exit ways. (A, B)
 - D) Fire alarms activated at manual stations, by electric water flow alarm devices in connection with sprinkler systems, and by all automatic detection systems. (A, B)
 - E) Communication systems, where these are used for issuing instructions during emergency conditions. (A, B)
 - F) Task illumination, and selected receptacles at the generator set location. (B)
- 4) Critical Branch, Automatic Transfer ten Seconds
 - A) Task illumination and selected receptacles in the nurse's station including the medication preparation area. (B)
 - B) Sump pumps and other equipment required to operate for the safety of major apparatus including associated control systems and alarms. (B)
 - C) Elevator cab lighting and communication systems. (B)
 - D) Nurses' call system (B)

- 5) Critical Branch, Automatic or Manual Systems Heating equipment to provide heating for patient rooms. EXCEPTION: Where the facility is served by two or more electrical services supplied from separate generators or a utility distribution network having multiple power input sources and arranged to provide mechanical and electrical separation so that a fault between the facility and the generating sources is not likely to cause an interruption of more than one of the facility service feeders. (B)

- 6) Details
 - A) The life safety and critical branch shall be in operation within ten seconds after the interruption of normal electric power supply. (B)

 - B) Receptacles connected to emergency power shall be distinctively marked. (B)

 - C) The emergency generator shall not be solely dependent upon a public utility gas system for the fuel supply. Means shall be provided for automatically transferring from one fuel supply to another where dual fuel supplies are used. (B)

 - D) Where fuel storage facilities are provided on the site, the fuel tank shall have minimum capacity for 24 hour operation of the generator. (B)

(Source: Amended at 13 Ill. Reg. 4684, effective March 24, 1989)