

## **902 KAR 20:310. Facility specifications; nursing facility.**

RELATES TO: KRS 216B.010-216B.130, 216B.990(1), (2)

STATUTORY AUTHORITY: KRS 216B.042, 216B.105

NECESSITY, FUNCTION, AND CONFORMITY: KRS 216B.042 and 216B.105 mandate that the Kentucky Cabinet for Human Resources regulates health facilities and health services. This administrative regulation provides licensure requirements for structural specifications for the construction, alteration and maintenance of nursing facilities.

### **Section 1. Definitions.**

- (1) "Board" means the Commission for Health Economics Control in Kentucky.
- (2) "License" means an authorization issued by the cabinet for the purpose of operating a nursing facility.
- (3) "Licensure agency" means the Division for Licensing and Regulation in the Office of the Inspector General, Cabinet for Human Resources.

### **Section 2. Applicability.**

- (1) Nursing homes, skilled or intermediate care facilities that were found to be in compliance on their last annual licensure survey will be considered to be in compliance with this licensure administrative regulation, except for the requirements of Section 17(7)(d)3 of this administrative regulation, or any alterations.
- (2) Applications for certificate of need submitted prior to December 1, 1990 may choose to build to either these specifications or to the specifications in the licensure category requested on their certificate of need application.

### **Section 3. Preparation and Approval of Plans and Specifications for New Construction or Facility Alterations.**

- (1) Before construction is begun for the erection of new buildings or alterations to existing buildings or any change in existing nursing facilities, the licensee or applicant shall submit plans to the licensure agency for approval.
- (2) All architectural, mechanical and electrical drawings shall bear either the seal of an architect registered in the Commonwealth of Kentucky or the seal of a professional engineer registered in the Commonwealth of Kentucky, or both.
- (3) Drawings shall not exceed thirty-six (36) by forty-six (46) inches when trimmed.
- (4) All such plans and specifications must be approved by the licensure agency prior to commencement of construction of new buildings or alteration of existing buildings.
- (5) Plans and specifications in specific detail as required by the Kentucky Building Code shall be submitted together with architectural and/or engineering stamps as required by KRS Chapters 322 and 323, to the Department of Housing, Buildings and Construction for determining compliance with the Kentucky Building Code. All such plans and specifications must be approved by the Department of Housing, Buildings and Construction and appropriate local building permits shall be obtained prior to commencement of any alteration.

### **Section 4. Submission of Plans and Specifications.**

- (1) First stage, schematic plans.
  - (a) Single line drawings of each floor shall show the relationship of the various departments or services to each other and the room arrangement in each department. The name of each room shall be noted. Drawings shall include typical patient room layouts (scaled one-fourth (1/4) inch to one (1) foot) with dimensions noted. The proposed roads and walks, service and entrance courts, parking and orientation shall be shown in a plot plan.
  - (b) If the project is an addition or is otherwise related to existing buildings on the site, the plans shall show the facilities and general arrangements of those buildings.

- (2) Second stage, preliminary plans. Preliminary sketch plans shall include the following:
- (a) Architectural: plans of basement and floors.
  - (b) Outline specifications.
    - 1. General description of the construction or alteration, including interior finishes, types and locations of acoustical material, and special floor covering;
    - 2. Description of the air-conditioning, heating, and ventilation systems and their controls, duct and piping systems; and dietary, laundry, sterilizing, and other special equipment;
    - 3. General description of electrical service including voltage, number of feeders, and whether feeders are overhead or underground.
- (3)
- (a) Working drawings. Working drawings shall be complete and adequate for bid, contract, and construction purposes. Drawings shall be prepared for each of the following branches of the work: architectural, structural, mechanical, and electrical. They shall include the following:
    - 1. Architectural drawings.
      - a. Approach plan showing all new topography, newly established levels and grades, existing structures on the site (if any), new building structures, roadways, walks, and parking areas;
      - b. Plan of each basement, floor and roof;
      - c. Elevations of each facade;
      - d. Sections through building;
      - e. Required scale and full-size details;
      - f. Schedule of doors, windows, and room finishes;
      - g. Layout of typical and special rooms indicating all fixed equipment and major items of movable equipment. Equipment not included in contract shall be so indicated;
      - h. Conveying systems. Details of construction, machine and control space necessary, size and type of equipment, and utility requirements for the following: dumbwaiters-electric, hand, hydraulic; elevators-freight, passenger, patient; loading dock devices; pneumatic tube systems.
    - 2. Structural drawings.
      - a. Plans for foundations, floors, roofs, and all intermediate levels with sizes, sections, and the relative location of the various structural members;
      - b. Dimensions of special openings;
      - c. Details of all special connections, assemblies, and expansion joints.
    - 3. Mechanical drawings.
      - a. Heating, steam piping, and air-condition systems. Radiators and steam heated equipment, such as sterilizers, warmers, and steam tables; heating and steam mains and branches with pipe sizes; sizes, types, and capacities of boilers, furnaces, hot water heater with stokers; oil burners, or gas burners; pumps, tanks, boiler breeching, and piping and boiler room accessories; air-conditioning systems with required equipment, water and refrigerant piping, and ducts; supply and exhaust ventilation systems with heating/cooling connections and piping; air quantities for all room supply and exhaust ventilating duct openings.
      - b. Plumbing, drainage, and standpipe systems. Size and elevation of: street sewer, house sewer, house drains, street water main, and water service into the building; location and size of soil, waste, and water service with connections to house drains, clean-outs, fixtures, and equipment; size and location of hot, cold and circulating branches, and risers from the service entrance, and tanks; riser diagram of all plumbing stacks with vents, water risers, and fixture connections; gas,

oxygen, and vacuum systems; standpipe and sprinkler systems where required; all fixtures and equipment that require water and drain connections.

4. Electrical drawings.

- a. Electric service entrance with switches and feeders to the public service feeders, characteristics of the light and power current, transformers and their connections if located in the building;
- b. Location of main switchboard, power panels, light panels, and equipment. Diagram of feeders and conduits 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;
- e. Nurses' call systems with outlets for beds, duty stations, door signal light, annunciators, and wiring diagrams;
- f. Emergency electrical system with outlets, transfer switch, sources of supply, feeders, and circuits;
- g. All other electrically operated systems and equipment.

(b) Specifications. Specifications shall supplement the drawings to fully describe types, sizes, capacities, workmanship, finishes and other characteristics of all materials and equipment and shall include:

1. Cover or title sheet;
2. Index;
3. Sections describing materials and workmanship in detail for each class of work;
4. Access to the work. Representatives of the appropriate state agencies shall have access at all reasonable times to the work wherever it is in preparation or progress, and the contractor shall provide proper facilities for such access and inspection.

Section 5. Compliance with Building Codes, Ordinances and Regulations.

(1) This section may be administered independently from other sections of this administrative regulation.

(2) General. Nothing stated herein shall relieve the sponsor from compliance with building codes, ordinances, and regulations which are enforced by city, county, or state jurisdictions.

(3) The following requirements shall apply where applicable and as adopted by the respective agency authority:

- (a) Requirements for safety pursuant to 815 KAR 10:020, as amended;
- (b) Requirements for plumbing pursuant to 815 KAR 20:010 through 20:190, as amended;
- (c) Requirements for air contaminants for incinerators pursuant to 401 KRS 59:020 and 401 KAR 61:010;
- (d) Requirements for elevators pursuant to 815 KAR 4:010; and
- (e) Requirements for making buildings and facilities accessible to and usable by the physically handicapped, pursuant to KRS 198B.260 and administrative regulations promulgated thereunder.

(4) Prior to occupancy, facility must have final approval from appropriate agencies.

(5) All facilities shall be currently approved by the Fire Marshal's Office in accordance with the Life Safety Code, before relicensure is granted by the licensure agency.

Section 6. Facility Requirements and Special Conditions.

(1) Independent facilities with a capacity of fifty (50) beds or less present special problems. The sizes of the various departments will depend upon the requirements of the facilities. Some functions allotted separate spaces or rooms in these general standards may be combined provided that the resulting plan will not compromise the standards of safety and of medical and nursing practices and the social needs of patients. In other

respects, the general standards set forth herein, including the area requirements, shall apply.

(2) Facilities shall be available to the public, staff, and patients who may be physically handicapped with special attention given to ramps, drinking fountain height, mirrors, etc.

(3) The number of beds in a nursing unit shall not exceed sixty (60) unless additional services are provided, as deemed necessary by the licensure agency. At least two (2) rooms per nursing unit shall be designed for single person occupancy (one (1) bed) and shall have private toilet rooms with bath. At least sixty (60) percent of the beds shall be located in rooms designed for one (1) or two (2) beds.

#### Section 7. Nursing Unit.

(1) Patient rooms. Each patient room shall meet the following requirements:

(a) Maximum room capacity: four (4) patients;

(b) Patient rooms shall be designed to permit no more than two (2) beds side by side parallel to the window wall. Not less than a four (4) foot space shall be provided between beds, and at least a three (3) foot space between the side of a bed and the nearest wall, fixed cabinet, or heating/cooling element. A minimum of four (4) feet is required between foot of bed and opposite wall, or foot of opposite bed in multibed rooms;

(c) Window. All patient rooms must have windows opening to the outside. Sill shall not be higher than three (3) feet above the floor and shall be above grade. Window area to be at least eight (8) percent of patient room floor area;

(d) Lavatory. In single and two (2) bed rooms with private toilet room, the lavatory may be located in the toilet room. Where two (2) patient rooms share a common toilet, a lavatory shall be provided in each patient room;

(e) Wardrobe or closet for each patient. Minimum clean dimensions: one (1) foot deep by one (1) foot and eight (8) inches wide with full length hanging space clothes rod and shelf;

(f) Cubicle curtains, or equivalent built-in devices for complete privacy for each patient in each multibed room and in tub, shower and toilet rooms;

(g) No patient room shall be located more than 120 feet from the nurses' station, the clean workroom, and the soiled workroom. No room shall be used as a patient room where the access is through another patient's room;

(2) Patient toilet rooms.

(a) A toilet room shall be directly accessible from each patient room and from each central bathing area without going through the general corridor. One (1) toilet room may serve two (2) patient rooms but not more than four (4) beds. The minimum dimensions of any room containing only a toilet shall be three (3) feet by five (5) feet;

(b) Toilets must be easily usable by wheelchair patients. Grab bars shall be provided at all toilets;

(c) At least one (1) toilet for each sex shall be provided for training purposes and access by wheelchairs. It shall be accessible from the nursing corridor, may be part of the bathing area and shall have a minimum size, of five (5) feet by six (6) feet;

(d) Doors to toilet rooms shall have a minimum width of two (2) feet and ten (10) inches to admit a wheelchair.

(3) Service areas in each nursing unit. The size of each service area will depend on the number and types of beds within the unit include:

(a) Nurses' station for nurses' charting, doctors' charting, communications, and storage for supplies and nurses' personal effects;

(b) Staff lounge area. The area shall have personal storage space and a toilet room for staff;

- (c) Visitors toilet room. The facility shall provide a toilet room for visitors. The staff toilet room may serve as the visitors toilet room if marked and accessible;
- (d) Clean workroom for storage and assembly of supplies for nursing procedures containing work counter, sink;
- (e) Soiled workroom containing clinical sink, work counter with two (2) compartment sink, waste receptacles, and soiled linen receptacles;
- (f) Medicine room adjacent to nurses' station with sink, refrigerator, locked storage, and facilities for preparation and dispensing of medication (may be designated area within clean workroom if a self-contained cabinet is provided). The controlled substances locker must be under double lock;
- (g) Clean linen storage with enclosed storage space (may be a designated area within the clean workroom);
- (h) Nourishment station with storage space, sink, hot plate and refrigerator for serving between-meal nourishments (may serve one (1) nursing unit on same floor);
- (i) Equipment storage room for storage of IV stands, inhalators, air mattresses, walkers, and similar bulky equipment (may serve more than one (1) nursing unit on same floor);
- (j) Patient baths. One (1) shower stall or one (1) bathtub required for each fifteen (15) beds not individually served. There shall be at least one (1) freestanding bathtub in each bathroom. Grab bars or patient lift with a safety device shall be provided at all bathing fixtures. Each bathtub or shower enclosure in central bathing facilities shall provide space for a wheelchair and attendant. Showers in central bathing facilities shall not be less than four (4) feet square, without curbs, and designed to permit use from a wheelchair. Soap dishes in showers and bathrooms shall be recessed;
- (k) Stretcher and wheelchair parking area or alcove;
- (l) Janitor's closet for storage of housekeeping supplies and equipment. Floor receptor or service sink;
- (m) Bedpan washing facilities. Separate bedpan washing closets in each nursing unit which are located so that bedpans need not be carried through lobbies, dining and recreation areas or day rooms are recommended. It will be acceptable, however, to have bedpan washing attachments for each patient room toilet.
- (4) Patient's dining, TV viewing and recreation areas.
  - (a) The total areas set aside for these purposes shall be not less than thirty (30) square feet per bed for the first fifty (50) beds and twenty (20) square feet per bed for all beds in excess of fifty (50). Additional space shall be provided for outpatients if they participate in a day care program.
  - (b) Storage shall be provided for recreational equipment and supplies (e.g., wall cabinet and closets).

#### Section 8. Therapy Units.

- (1) If the facility has a physical therapy unit the following shall be provided (depending on the program):
  - (a) Office (may also serve for occupational therapy office);
  - (b) Exercise and treatment areas with sink or lavatory and cubicle curtains around treatment areas;
  - (c) Hydrotherapy areas with cubicle curtains around treatment areas;
  - (d) Storage for supplies and equipment; and
  - (e) Toilet rooms located for convenient access by physical therapy patient (may also serve occupational therapy patients).
- (2) If the facility has an occupational therapy unit it shall include:
  - (a) Office space (may be shared with physical therapy office);
  - (b) Therapy area with sink or lavatory;

- (c) Storage for supplies and equipment;
- (d) Toilet room (not required if other toilet facilities are convenient).
- (3) Personal care room with space for shampoo sink and barber chair (not required in facility of less than twenty-five (25) beds).
- (4) If the facility has more than 120 beds, it shall provide the following:
  - (a) Office space for a social worker;
  - (b) Toilet room (not required if other toilet facilities are convenient).

Section 9. Dietary Department. If a commercial service will be used or meals will be provided by an adjacent hospital, dietary areas and equipment shall be designed to accommodate the requirements for sanitary storage, processing, and handling, otherwise the following shall be provided:

- (1) Food preparation center with a lavatory but no mirror;
- (2) Food serving facilities to accommodate patients and staff;
- (3) Dishwashing room with commercial-type and a lavatory;
- (4) Potwashing facilities;
- (5) Refrigerated storage to accommodate three (3) day supply;
- (6) Dry storage to accommodate three (3) day supply;
- (7) Cart-cleaning facilities;
- (8) Cart storage area;
- (9) Waste disposal facilities;
- (10) Can washing facilities;
- (11) Staff dining facilities;
- (12) Patient dining facilities;
- (13) Janitor's closet with storage for housekeeping supplies and equipment, floor receptor or service sink; and
- (14) Toilet room which is conveniently accessible to dietary staff with a two (2) door separation from food preparation area or dining area.

Section 10. Administration Department. The facility shall have adequate administrative, public, and staff facilities (e.g., offices, lobby, toilet facilities) to accommodate the needs of the public, patients, and staff without interfering with the provision of medical care services.

Section 11. Laundry. The following shall be included:

- (1) Soiled linen room;
- (2) Clean linen and mending room;
- (3) Linen cart storage;
- (4) Lavatories accessible from soiled, clean, and processing rooms;
- (5) Laundry processing room with commercial type equipment sufficient to take care of seven (7) days' needs within the workweek;
- (6) Janitor's closet with storage for housekeeping supplies and equipment, floor receptor or service sink; and
- (7) Storage for laundry supplies. (Subsections (5), (6) and (7) of this section need not be provided if laundry is processed outside the facility.)

Section 12. Storage and Service Areas.

- (1) Central storage room(s) with at least ten (10) square feet per bed for first fifty (50) beds; and five (5) square feet per bed for eleven (11) beds over fifty (50), to be concentrated in one (1) area.
- (2) Adequate secure storage space must be provided for staff and volunteer's personal belongings.
- (3) Engineering service and equipment areas. The following shall be provided:
  - (a) Boiler room;
  - (b) Mechanical and electrical equipment room(s) (can be combined with boiler room);

- (c) Adequate storage for building maintenance and engineering supplies;
- (d) Storage room for housekeeping equipment (need not be provided if space is available in janitor's closets or elsewhere);
- (e) Incinerator space. If the facility has an incinerator, it shall be in a separate room, in a designated area within the boiler room, or outdoors;
- (f) Yard equipment storage room for yard maintenance equipment and supplies.

Section 13. Details and Finishes. The facility shall be designed for maximum safety for the occupants to minimize the incidence of accidents. Hazards such as sharp corners shall be avoided. All details and finishes shall meet the following requirements:

(1) Details.

- (a) Doors to patient toilet rooms and other rooms needing access for wheelchairs shall have a minimum width of two (2) feet and ten (10) inches.
- (b) Such items as drinking fountains, telephone booths and vending machines shall be located so that they do not project into the required width of exit corridors.
- (c) Handrails shall be provided on both sides of corridors used by patients in facilities with a clear distance of one-half (1/2) inch between handrail and wall.
- (d) All doors to patient-room toilet rooms and patient-room bathrooms shall swing outward or shall be equipped with hardware which will permit access in any emergency.
- (e) All doors opening onto corridors shall be swing-type except elevator doors. Alcoves and similar spaces which generally do not require doors are excluded from this requirement.
- (f) Thresholds and expansion joint covers, if used, shall be flush with the floor.
- (g) Grab bars and accessories in patient toilet, shower, and bathrooms shall have sufficient strength and anchorage to sustain a load of 250 pounds for five (5) minutes.
- (h) Lavatories intended for use by patients shall be installed to permit wheelchairs to slide under.
- (i) The location and arrangement of lavatories and sinks with blade handles intended for handwashing purposes shall provide sixteen (16) inches clearance each side of center line of fixture.
- (j) Mirrors shall be arranged for convenient use by patients in wheelchairs as well as by patients in standing position.
- (k) Towel dispensers shall be provided at all lavatories and sinks used for handwashing.
- (l) If linen and refuse chutes are used, they shall be designed as follows:
  1. Minimum diameter of gravity-type chutes shall be two (2) feet;
  2. Chutes shall extend at least four (4) feet above the roof and shall be covered by a metal skylight glazed with thin plain glass or plastic.
- (m) Ceiling heights.
  1. The boiler room ceiling shall not be less than two (2) feet six (6) inches above the main boiler header and connecting piping with nine (9) feet headroom under piping for maintenance and access;
  2. Corridors, storage rooms, patients' toilet room, and other minor rooms shall not be less than seven (7) feet and six (6) inches.
  3. Ceilings in all other rooms shall not be less than eight (8) feet.
- (n) Boiler room, food preparation centers, and laundries shall be insulated and ventilated to prevent any floor surface above from exceeding a temperature of eighty-five (85) degrees Fahrenheit.
- (o) Noise reduction criteria. Provision shall be made to minimize sound transmission in:
  1. Corridors in patient areas;

2. Nurses' stations;
3. Utility rooms;
4. Floor pantries; and
5. Lobbies and recreation areas.

(p) Special attention shall be given to sound transmission from boiler rooms, mechanical rooms, and kitchen, to patient bedroom areas.

(2) Finishes.

(a) Floors generally shall be easily cleanable and shall have the wear resistance appropriate for the location involved. Floors in kitchen and related spaces shall be waterproof and grease-proof. In all areas where floors are subject to wetting, they shall have a nonslip finish. Carpeting is not permitted in the following areas: kitchen, dishwashing room, soiled utility room, janitor's closet, soiled linen rooms, storage room, bathrooms, public toilet rooms, patient toilet rooms, hydrotherapy rooms, treatment rooms, and any other room where the floor is subject to repeated wetting or soiling.

(b) Adjacent dissimilar floor materials shall be flush with each other to provide an unbroken surface.

(c) Walls generally shall be washable and in the immediate area of plumbing fixtures, the finish shall be moisture-proof. Wall bases in dietary areas shall be free of spaces that can harbor insects.

(d) Ceilings generally shall be washable or easily cleanable. This requirement does not apply to boiler rooms, mechanical and building equipment rooms, shops and similar spaces.

Section 14. Elevators. All facilities where either patient beds or inpatient facilities such as diagnostic, recreation, patient dining or therapy rooms are located on other than the first floor, shall have electric or electrohydraulic elevators as follows:

(1) Number of elevators. All facilities with patient beds or residential facilities located on any floor other than the first floor shall have at least one (1) hospital-type elevator and such additional elevators as determined by the licensure agency from a study of the facility plan and the estimated vertical transportation requirements.

(2) Cars and platforms. Elevator cars and platforms shall be constructed of noncombustible material, except that fire-retardant-treated material may be used if all exterior surfaces of the cars are covered with metal. Cars of hospital-type elevators shall have inside dimensions that will accommodate a patient's bed and attendants and shall be at least five (5) feet wide by seven (7) feet and six (6) inches deep. Car doors shall have a clear opening of not less than three (3) feet and eight (8) inches. Cars of all other required elevators shall have a clear opening of not less than three (3) feet.

(3) Leveling. Elevators shall have automatic leveling of the two (2) way automatic maintaining type with accuracy within plus or minus one-half (1/2) inch.

Section 15. Foundations. Foundations shall rest on natural solid ground if a satisfactory soil is available at reasonable depths. Proper soil bearing values shall be established in accordance with recognized standards. If solid ground is not encountered at practical depths, the structure shall be supported on driven piles or drilled piers designed to support the intended load without detrimental settlement.

Section 16. Mechanical Requirements.

(1) General. Prior to completion of the contract and final acceptance of the facility, the architect and/or engineer shall obtain certification from the contractor that all mechanical systems have been tested and that the installation and performance of these systems conform to the requirements of the plans and specifications.

(2) Steam and hot water systems.



(a) Boilers. If boilers are used, a minimum of two (2) must be provided. The combined capacity of the boilers, based upon the published Steel Boiler Institute of Boiler and Radiator Manufacturer's net rating, must be able to supply 150 percent of the normal requirements of all systems and equipment.

(b) Covering. Boiler and smoke breeching, all steam supply piping and high pressure steam return piping, and hot water space heating supply and return piping shall be insulated.

(3) Temperatures and ventilating systems.

(a) Temperatures. A minimum temperature of seventy-one (71) degrees Fahrenheit, shall be provided for in all occupied areas in winter conditions. A maximum temperature of eighty-one (81) degrees Fahrenheit shall be provided for in occupied areas in summer conditions.

(b) Ventilation system details. 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. The ventilation rates shown in Section 17, Table 1 of this administrative regulation, shall be considered as minimum acceptable rates and shall not be construed as precluding the use of higher ventilation rates if they are required to meet design conditions.

1. Outdoor ventilation air-intakes, other than for individual room units, shall be located as far away as practicable but not less than twenty-five (25) feet from the exhausts from any ventilating system or combustion equipment. The bottom of outdoor intakes serving central air systems shall be located as high as possible but not less than eight (8) feet above the ground level or, if installed through the roof, three (3) feet above roof level.

2. The ventilation systems shall be designed and balanced to provide the general pressure relationship to adjacent areas shown in Section 17, Table 1 of this administrative regulation.

3. Room supply air inlets, recirculation, and exhaust air outlets installed in nonsensitive areas shall be located not less than three (3) inches above the floor.

4. Corridors shall not be used to supply air to or exhaust air from any room, except that exhaust air from corridors may be used to ventilate bathrooms, toilet rooms, or janitor's closets opening directly into corridors.

5. Filters.

a. Central systems that serve patient care areas shall be provided with filters rated at eighty (80) percent efficiency based upon the National Bureau of Standards Dust Spot Method with Atmospheric Dust.

b. Central systems that serve only areas other than patient care areas shall be provided with filters rated at twenty-five (25) percent efficiency based upon the National Bureau of Standards Dust Spot Method with Atmospheric Dust.

6. Boiler rooms shall be provided with sufficient outdoor air to maintain combustion rates of equipment and required temperatures in the facility.

(4) Plumbing and other piping systems.

(a) Lavatories and sinks required in patient care areas shall have the water supply spout mounted so that its discharge point is a minimum distance of five (5) inches above the rim of the fixture. All fixtures used by medical and nursing staff, and all lavatories used by patients and food handlers shall be trimmed with valves which can be operated without the use of hands. Where blade handles are used for this purpose, they shall be at a distance from the center line of the sink to be operational.

(b) Clinical sinks shall have an integral trap in which the upper portion of a visible trap seal provides a water surface.

(5) Water supply system.

- (a) Systems shall be designed to supply water to the fixtures and equipment on the upper floors at a minimum pressure of fifteen (15) pounds per square inch during maximum demand periods.
- (b) 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.
- (c) Hot, cold and chilled water piping and waste piping on which condensation may occur shall be insulated. Insulation of cold and chilled water lines shall include an exterior vapor barrier.
- (d) Backflow preventers (vacuum breakers) shall be installed on hose bibbs and on all fixtures to which hoses or tubing can be attached such as janitor's sinks and bedpan flushing attachments.
- (e) Bedpan flushing devices shall be provided.
- (f) Hot water distribution systems shall be arranged to provide hot water at each fixture at all times.
- (g) Plumbing fixtures which require hot water and which are intended for patient use shall be supplied with water which is controlled to provide a maximum water temperature of 110 degrees Fahrenheit at the fixture.
- (h) Piping over food preparation centers, food serving facilities, food storage areas, and other critical areas shall be kept to a minimum and shall not be exposed. Special precautions shall be taken to protect these areas from possible leakage of, or condensation from, necessary overhead piping systems.
- (6) Hot water heaters and tanks.
  - (a) The hot water heating equipment shall have sufficient capacity to supply the water at the temperature and amounts indicated below:

	Use		
	Clinical	Dietary	Laundry
Gal/hr/bed	6 1/2	4	4 1/2
Temp. F.	100-110	180*	140-180**

\*Temperature may be reduced to 140 if chloritizer is used.

\*\*If the temperature used is below 180, the facility shall utilize detergents and other additives to insure that the linens will be adequately cleaned.

- (b) A hot water system which supplies fixtures utilized by patients shall be equipped with an antiscald mixing valve.
- (c) Storage tank(s) shall be provided and shall be fabricated of corrosion-resistant metal, or have noncorrosive lining.
- (7) Plumbing approval. Prior to final approval of the plans and specifications by the licensure agency, the plumbing plans and specifications must be approved by the Division of Plumbing, Department of Housing, Buildings and Construction.

#### Section 17. Electrical Requirements.

- (1) Electrical requirements of the Kentucky Building Code shall apply where applicable.
- (2) The wiring in each facility shall be inspected by a certified electrical inspector and a certificate of approval shall be issued to the facility, prior to occupancy. However, the wiring in existing buildings shall be approved by a certified electrical inspector only when the building has not been previously so approved for health care occupancy or where the State Fire Marshal finds that a hazardous condition exists.
- (3) Switchboard and power panels. All breakers and switches shall be indexed.
- (4) Lighting.

- (a) All spaces occupied by people, machinery, and equipment within buildings, and the approaches thereto, and parking lots shall have electric lighting.
  - (b) Patients' bedrooms shall have general lighting and night lighting. A reading light shall be provided for each patient. A fixed receptacle type night light mounted approximately sixteen (16) inches above the floor, shall be provided in each patient room. Patients' reading lights and other fixed lights not switched at the door shall have switch controls convenient for use at the luminaire. All switches for control of light in patient areas shall be of the quiet operating type.
  - (c) Lighting levels for the facility shall comply with the requirements of Section 17, Table 2 of this administrative regulation.
- (5) Receptacles. Convenience outlets.
- (a) Bedroom. Each patient bedroom shall have duplex receptacles on each side of the head of each bed (for parallel adjacent beds, only one (1) receptacle is required between the beds), receptacles for luminaries television and motorized beds, if used, and one (1) receptacle on another wall.
  - (b) 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 of corridors.
- (6) Nurses' calling system. A nurses' calling station shall be installed at each patient bed and in each patient toilet, bath, and shower room. The nurses' call in toilet, bath, or shower rooms, shall be an emergency call. All calls shall register at the nurses' station and shall actuate a visible signal in the corridor at the patients' door, in the clean workroom, soiled workroom, and nourishment station of the nursing unit. Nurses' call systems which provide two (2) way voice communications shall be equipped with an indicating light at each calling station which lights and remains lighted as long as the voice circuit is operative.
- (7) Emergency electric service.
- (a) General. To provide electricity during an interruption of the normal electric supply that could affect the nursing care, treatment, or safety of the occupants, an emergency source of electricity shall be provided and connected to certain circuits for lighting and power.
  - (b) Sources. The source of this emergency electric service shall be as follows:
    - 1. An emergency generating set, when the normal service is supplied by one (1) or more central station transmission lines;
    - 2. An emergency generating set or a central station transmission line, when the normal electric supply is generated on the premises.
  - (c) Emergency generating set.
    - 1. The required emergency generating set, including the prime mover and generator, shall be located on the premises and shall be reserved exclusively for supplying the emergency electric system. The emergency generator set shall be sufficient kilowatt capacity to supply all electrical connections itemized in paragraph (d) of this subsection.
    - 2. In facilities constructed prior to the effective date of this administrative regulation which are supplied by at least two (2) dedicated and separate utility service feeders, an emergency generating set is not required.
  - (d) Emergency electrical connections. Emergency electric service shall be provided to circuits as follows:
    - 1. Lighting.
      - a. Exitways and all necessary ways of approach thereto, including exit signs and exit direction signs, exterior of exits, exit doorways, stairways, and corridors;
      - b. Dining and recreation rooms;
      - c. Nursing station and medication preparation area;
      - d. Generator set location, switch-gear location, and boiler room;

- e. Elevator; and
  - f. Night lights in patient rooms.
2. Equipment. Essential to life safety and for protection of important or vital materials:
- a. Nurses' calling system;
  - b. Alarm system including fire alarm actuated at manual stations, water-flow alarm devices of sprinkler system if electrically operated, fire-detecting and smoke-detecting systems, paging or speaker systems if intended for issuing instructions during emergency conditions, and alarms required for nonflammable medical gas systems, if installed;
  - c. Fire pump, if installed;
  - d. Sewerage or sump-lift pump, if installed;
  - e. At least one (1) duplex receptacle located on the headwall in each patient room;
  - f. One (1) elevator, where elevators are used for vertical transportation of patients. Provide manual switch-over to operate other elevators.
  - g. Equipment such as burners and pumps necessary for operation of one (1) or more boilers and their necessary auxiliaries and controls, required for heating and sterilization; and
  - h. Equipment necessary for maintaining telephone service.
3. Emergency heating.
- a. By September 1, 1992 an emergency heating system for the patient rooms, or the corridors of the facility designed at 150 percent efficiency, shall be required; or
  - b. Emergency heating of patient rooms or corridors shall not be required in areas where the facility is supplied by at least two (2) utility service feeders, each supplied by separate generating sources or a network distribution system fed by two (2) or more generators, with the facility feeders so routed, connected, and protected that a fault any place between the generators and the facility will not likely cause an interruption of more than one (1) of the facility service feeders; or
  - c. For a facility existing prior to the effective date of this administrative regulation, an acceptable transfer agreement with another facility which meets the requirements of clause a. or b. of this subparagraph or is supplied by a separate generating source or network distribution system which is so routed, connected, and protected that a fault any place between the generator and the transferring facility would not affect the receiving facility. This receiving facility shall be within a reasonable distance and provide adequate space to assure an orderly transfer. The transfer agreement shall specify how the resident will be cared for at the receiving facility.
- (e) Details. The emergency system shall be so controlled that after interruption of the normal electric power supply, the generator is brought to full voltage and frequency and connected within ten (10) seconds through one (1) or more primary automatic transfer switches to all emergency lighting, all alarms, nurses' call, equipment necessary for maintaining telephone service, and receptacles in patient corridors. All other lighting and equipment required to be connected to the emergency system shall either be connected through the above described primary automatic transfer switching or shall be subsequently connected through other automatic or manual transfer switching. Receptacles connected to the emergency system shall be distinctively marked for identification. Storage battery-powered lights shall not be used as a substitute for the requirement of a generator. Where fuel is normally stored on the site, the storage capacity shall be sufficient for twenty-four (24) hour operation of required emergency electric services. Where fuel is normally piped underground to the site from a utility distribution system, storage facilities on the site will not be required.

Section 18. Tables.

TABLE 1 PRESSURE RELATIONSHIPS AND VENTILATION OF CERTAIN NURSING FACILITY AREAS

Area Designation	Pressure Relationship to Adjacent Areas	Minimum Air Changes of Outdoor Air per Hour	Minimum Total Air Changes Per Hour	All Air Exhausted to Outdoors
Patient room	O	1	4	--
Patient room corridor	O	2	4	--
Treatment room	O	1	6	Yes
Physical and hydrotherapy; if applicable	N	2	6	--
Dining and recreation areas	O	2	4	--
Soiled workroom	N	2	4	Yes
Clean workroom	P	2	4	--
Toilet room	N	--	10	Yes
Bedpan room; if applicable	N	--	10	Yes
Bathroom	N	--	10	Yes
Janitor's closet	N	--	10	Yes
Linen and trash chute rooms	N	--	10	Yes
Food preparation center	O	2	10	Yes
Dishwashing area	N	--	10	Yes
Dietary dry storage	O	--	2	--
Laundry, general	O	2	10	Yes
Soiled linen sorting and storage	N	--	10	Yes
Clean linen storage	P	2	2	--

P = Positive N = Negative O = Equal -- = Optional

Table 2 Lighting Levels for Nursing Facilities

Area	Foot-candles*
Administrative and lobby areas, day	50
Administrative and lobby areas, night	20
Barber and beautician areas; if applicable	50
Corridors and interior ramps	20
Corridor night lighting	3
Dining area and kitchen	30
Doorways	10
Exit stairways and landings	5
Janitor's closet	15
Nurses' station, general, day	50
Nurses' station, general, night	20
Nurses' desk, for charts and records	70
Nurses' medicine cabinet	100
Patient care unit (or room), general	10
Patient care room, reading	30
Recreation area (floor level)	50
Stairways other than exits	30
Toilet and bathing facilities	30
Utility room, general	20
Utility room, work counter	50

\*Minimum on task at anytime.

(17 Ky.R. 2331; 2741; eff. 5-3-1991; Crt eff. 4-30-2019; TAm eff. 3-20-2020.)