J. Facility and Program Evaluation. Program evaluation is a management tool primarily utilized by the facility’s Administrator to assess and monitor, on a priority basis, a variety of facility services and programmatic activities which shall be a component of the Assurance/Performance Improvement Program. The facility shall have a written statement of goals and objectives, established as a result of a planning process, and provided to the Governing Body for approval. There shall be documentation that the goals and objectives of facility services and programmatic activities are evaluated at least annually and revised as necessary.

K. Individualized Comprehensive Treatment Planning.

1. Intake. Written policies and procedures governing the intake process shall specify the following:
   a. The information to be obtained on all applicants or referrals for admission;
   b. The treatment required can be appropriately provided by the facility or program component; and
   c. The statistical data to be kept on the intake process; and
   d. The procedures to be followed when an applicant or a referral is found ineligible for admission.

2. Criteria for determining the eligibility of individuals for admission shall be clearly stated in writing.

3. The intake procedure shall include an initial assessment of the patient by professional staff.

4. Acceptance of a patient for treatment shall be based on an intake procedure that results in the following conclusions:
   a. The treatment required by the patient is appropriate to the intensity and restrictions of care provided by the facility or program component;
   b. The treatment required can be appropriately provided by the facility or program component; and
   c. The alternatives for less intensive and restricted treatment are not available.

5. The patient record shall contain the source of any referral.

6. During the intake process, every effort shall be made to assure that applicants understand the following:
   a. The nature and goals of the treatment program;
   b. The treatment costs to be borne by the patient, if any; and
c. The rights and responsibilities of patients, including the rules governing patient conduct and the types of infractions that can result in disciplinary action or discharge from the facility or program component.

7. Facilities shall have policies and procedures that adequately address the following items for each patient:
   a. Responsibility for medical and dental care, including consents for medical or surgical care and treatment;
   b. When appropriate, arrangements for family participation in the treatment program;
   c. Arrangements for clothing, allowances and gifts;
   d. Arrangements regarding the patient's departure from the facility or program; and
   e. Arrangements regarding the patient's departure from the facility or program against medical advice.

8. When a patient is admitted on court order, the rights and responsibilities of the patient and the patient's family shall be explained to them. This explanation of the rights and responsibilities of the patient and the patient's family shall be documented in the patient's record.

9. Sufficient information shall be collected during the intake process to develop a preliminary treatment plan.

10. Staff members who shall be working with the patient but who did not participate in the initial assessment shall be informed about the patient prior to the meeting.

L. Assessments.

1. Within 72 hours of admission, the staff shall conduct a complete assessment of each patient's needs. The assessment shall include, but shall not necessarily be limited to, physical, emotional, behavioral, social, recreational and nutritional needs.

2. A physician shall be responsible for assessing each patient's physical health. The health assessment shall include a medical, alcohol and medication history; a physical examination; neurological examination when indicated; and a laboratory workup. The physical examination shall be completed within 48 hours after admission.

3. In facilities serving children and adolescents, each patient's physical health assessment shall also include evaluations of the following: Motor development and functioning; sensorimotor functioning; speech, hearing, and language function, visual functioning; and immunization status. Facilities serving children and adolescents shall have all necessary diagnostic tools and personnel available to perform physical health assessments.

4. A Registered Nurse shall be responsible for obtaining a nursing history and assessment at the time of admission.
5. An emotional and behavioral assessment of each patient shall be completed and entered in the patient's record. The assessment shall include, but not be limited to, the following items:
   a. A history of previous emotional, behavioral, and substance abuse problem and treatment;
   b. The patient's current emotional and behavioral functioning; and
   c. When indicated, psychological assessments, including intellectual and personality testing.

6. A social assessment of each patient shall be completed by the qualified social worker and entered in the patient's record. The assessment shall include information relating to the following areas, as necessary:
   a. Environment and home;
   b. Religion;
   c. Childhood history;
   d. Military service history;
   e. Financial status;
   f. The social, peer group and environmental setting from which the patient comes; and
   g. The patient's family circumstances, including the constellation of the family group, the current living situation; and social, ethnic, cultural, emotional and health factors, including drug and alcohol use.

7. When appropriate, an activities assessment of each patient shall be completed by the qualified Activity Director and shall include information relating to the individual's current skills, talents, aptitudes and interest.

8. A nutritional assessment shall be conducted by the food service supervisor or Registered Dietitian and shall be documented in the patient's record.

9. An educational assessment shall be performed by personnel approved by the Arkansas Department of Education.

M. Treatment Plans.

1. Each patient shall have a written individual treatment plan that is based on assessments of their clinical needs.

2. Overall development and implementation of the treatment plan shall be assigned to an appropriate member of the professional staff.
3. The treatment plan shall be developed as soon as possible after the patient's admission. Appropriate therapeutic efforts may begin before a fully developed treatment plan is finalized.

4. Upon admission, a preliminary treatment plan shall be formulated on the basis of the intake assessment.

5. Within 72 hours following admission, a designated member of the treatment team shall develop an initial treatment plan based on at least an assessment of the patient's presenting problems, physical health, emotional status and behavioral status. This initial treatment plan shall be utilized to implement immediate treatment objectives. If a patient's stay in a facility is 10 days or less, only a discharge summary shall be required in addition to the initial treatment plan. If a patient's stay in a facility exceeds 10 days, the interdisciplinary team shall develop a master treatment plan that is based on a comprehensive assessment of the patient's needs. The master treatment plan shall contain objectives and methods for achieving them.

6. The treatment plan shall reflect the facility's philosophy of treatment and the participation of staff from appropriate disciplines.

7. The treatment plan shall specify the services necessary to meet the patient's needs.

8. The treatment plan shall include referrals for needed services that are not provided directly by the facility.

9. The treatment plan shall contain specific goals the patient shall achieve to attain, maintain, and/or reestablish emotional and/or physical health as well as maximum growth and adaptive capabilities. These goals shall be based on assessments of the patient and, as appropriate, the patient's family.

10. The treatment plan shall contain specific objectives that relate to the goals, written in measurable terms and include expected achievement dates.

11. The treatment plan shall describe the services, activities, and programs planned for the patient and shall specify the staff members assigned to work with the patient.

12. The treatment plan shall specify the frequency of treatment procedures.

13. The treatment plan shall delineate the specific criteria to be met for termination of treatment. Such criteria shall be a part of the initial treatment plan.

14. When appropriate, the patient shall participate in the development of his or her treatment plan and such participation shall be documented in the patient's record.

15. A specific plan for involving the family or significant others shall be included in the treatment plan when indicated.

N. Progress Notes.

1. Progress notes shall be recorded by the physician, nurse, social worker and, when appropriate, others significantly involved in treatment. The frequency of progress notes
is determined by the condition of the patient but shall be recorded at least weekly for the first two months and at least monthly thereafter.

2. Progress notes shall be entered in the patient's record and shall include the following:
   a. Documentation of implementation of the treatment plan;
   b. Documentation of all treatment rendered to the patient;
   c. Description of change in the patient's condition; and
   d. Descriptions of the response of the patient to treatment, the outcome of treatment and the response of significant others to important intercurrent events.

3. Progress notes shall be dated and signed by the individual making the entry.

4. All entries involving subjective interpretation of the patient's progress shall be supplemented with a description of the actual behavioral observation.

O. Treatment Plan Review.

1. Interdisciplinary case conferences shall be documented and the results of the review and evaluation shall be recorded in the patient's treatment plan and his or her progress in attaining the stated treatment goals and objectives.

2. Interdisciplinary case conferences shall be documented and the results of the review and evaluation shall be recorded in the patient's record. The review and update shall be completed no later than 30 days following the first 10 days of treatment, and at least 60 days thereafter.

P. Discharge Planning/After-care.

1. The facility shall maintain a centralized coordinated program to ensure each patient has a planned program of continuing care which meets his postdischarge needs.

2. Each patient shall have an individualized discharge plan which reflects input from all disciplines involved in his/her care. The patient, patient's family and/or significant others shall be involved in the discharge planning process.

3. Discharge planning data shall be collected at the time of admission or within seven days thereafter.

4. The Chief Executive Officer shall delegate the responsibility for discharge planning, in writing, to one or more staff members.

5. The facility shall maintain written discharge planning policies and procedures which describe:
   a. How the discharge coordinator shall function, and his authority and relationships with the facility's staff;
b. The time period in which each patient's need for discharge planning is determined (within seven days after admission);

c. The maximum time period after which reevaluation of each patient's discharge plan is made;

d. Local resources available to the facility and the patient to assist in developing and implementing individual discharge plans; and

e. Provisions for period review and reevaluation of the facility's discharge planning program (at least annually).

6. An interdisciplinary case conference shall be held prior to the patient's discharge. The discharge/after-care plan shall be reviewed with the patient, patient's family and/or significant others.

7. The facility shall have documentation of follow-ups to assure referrals to appropriate community agencies.

Q. Discharge Summary. A discharge summary shall be entered in the patient's record within 30 days following discharge. The discharge summary shall include, but not be limited to:

1. Reason for admission;

2. Brief summary of treatment;

3. Reason for discharge;

4. Assessment of treatment plan goals and objectives; and

5. Recommendations and arrangements for further treatment, including prescribed medications and after-care.

R. Additional Requirements. In addition to the requirements contained in this section, Alcohol/Drug Inpatient Treatment Centers shall comply with the applicable sections of the Rules and Regulations for Hospitals and Related Institutions in Arkansas.
SECTION 46: PHYSICAL ENVIRONMENT.

A. Building and Grounds.

1. The building and equipment shall be maintained in a state of good repair at all times.

2. Facilities and their premises shall be kept clean, neat and free of litter, rubbish.

3. Rooms for gas fired equipment shall not be used for storage except for noncombustible materials.

4. Portable equipment shall be supervised by the department having control of such equipment and shall be stored in areas which are not accessible to patients, visitors or untrained personnel.

5. Exit Access Corridors shall be maintained clear and unobstructed of stationary and non-patient related portable equipment. Stationary or portable non-patient care furnishings or equipment shall not be stored in an Exit Access Corridor. Any portable equipment such as a gurney, wheelchair, linen care, etc. that is not actively used within a 30 minute time period is considered “Stored”. The facility’s fire plan and training program shall address the relocation of these items during a fire. Exit Access Corridors for Health Care Occupancies are those aisles, corridors and ramps required for exit access that are located outside of a “suite of sleeping rooms” greater than 5,000 sq. ft. or “suite of rooms” greater than 10,000 sq. ft. (area is defined as occupiable net floor space). Encroachments on the width of the means of egress in an Exit Access Corridor by stationary objects or furnishings shall not be allowed. The width of the means of egress in an Exit Access Corridor shall be defined by physical means such as corridor walls, columns, wingwalls or other approved methods. The means of egress may provide both visual and physical barrier design characteristics conducive to establishing a common egress that provides for either a change in floor texture or self-illumination in the dark.

Alternative consideration: the Means of Egress Requirements for Health Care Occupancies of NFPA 101 (or equivalency per Section 47 of these rules).

6. Each hospital shall develop a written preventive maintenance plan. This plan shall be available to the Department for review at any time. Such plans shall provide for maintenance as recommended by manufacturer, applicable codes or designer.

7. The handwashing stations in visitors’ rest rooms and the handwashing stations used by staff personnel shall be equipped with a soap dispenser, and a towel dispenser.

8. A supply of hot water for patient use shall be available at all times. A weekly hot water temperature log shall be maintained.

9. Heating, ventilating and air-conditioning (HVAC) systems shall be operated, and maintained in a manner to provide a comfortable and safe environment for patients, personnel and visitors. An air filter change out log shall be maintained.

B. Maintenance and Engineering.
1. The physical plant and equipment maintenance programs shall be under the direction of a person qualified by training and/or experience and licensed where required.

2. Equipment Management Program (EMP). There shall be a preventive maintenance program designed to assure the electrically powered patient care equipment used to monitor, diagnose or provide therapy, performs properly and safely. This program shall be administered by individuals qualified through training and/or experience or by procuring a contractual maintenance agreement. The following are minimum program elements:
   a. A current list of electrically powered patient care equipment shall be maintained regardless of location or ownership;
   b. Each device, or identical group of devices, shall have a procedure establishing minimum criteria against which performance and safety are measured. The elements of these procedures shall be based on the manufacturer's directions;
   c. Each device shall be tested at intervals of not more than six months unless there is documented evidence that less frequent testing is justified;
   d. Historical records documenting acceptable performance as established by the procedures shall be maintained;
   e. A program to identify and repair equipment failures shall be maintained;
   f. User or owner departments shall be notified of the status of their equipment when it will be out of service more than 24 hours;
   g. There are operator and maintenance instructions for each device, or group of similar devices, on the electrically powered patient care equipment list; and
   h. Individuals shall be trained to operate and maintain equipment used in the performance of their duties. This training shall be documented.

3. Utilities Management Program (UMP). There shall be a preventive maintenance program designed to assure that the physical plant equipment and building systems perform properly and safely. This program shall be administered by individuals qualified through training and/or experience or by procuring a contractual agreement. This program shall consist of at least the following minimum elements:
   a. A list of physical plant equipment and/or building system(s) shall be maintained regardless of location or ownership;
   b. Equipment and/or building system(s), shall have a procedure establishing minimum criteria against which performance and safety are measured. The elements of these procedures shall be based on the manufacturer's directions and/or the experience of the repair technician or operator;
   c. Equipment and/or building system(s), shall be tested, serviced, or inspected at intervals of not more than 12 months unless there is documented evidence that less frequent service is justified;
d. Historical records documenting acceptable performance as established by the procedures shall be maintained;

e. A program to identify and repair equipment failures shall be maintained;

f. User or owner departments shall be notified of the status of their equipment or system when it will be out of service for more than 24 hours;

g. There shall be operator and/or maintenance instructions for each piece of equipment or building system on the list; and

h. Individuals shall be trained to operate and maintain physical plant equipment and/or building systems. This training shall be documented.

4. Life Safety Management Program (LSM). There shall be a preventive maintenance program designed to assure that all circuits of fire alarm and detection systems shall be inspected, tested and maintained in accordance with NFPA 72. Analog detection devices that provide automatic self-testing are exempt from the quarterly testing requirement. This program shall be administered by individuals qualified through training and/or experience or by procuring a contractual maintenance agreement. This program shall consist of the following minimum elements:

a. A list of all fire protection equipment or component groups shall be maintained;

b. Equipment and/or component groups, shall have a procedure establishing minimum criteria against which performance and safety are measured. The elements of these procedures shall be based on the manufacturer's recommendations and/or the experience of the repair technician or operator;

c. Fans or dampers in air handling and smoke management systems shall be reliable and functional at all times;

d. Automatic fire extinguishing systems shall be inspected and tested annually; actual discharge of the fire extinguishing system is not required. Records documenting acceptable performance as established by the procedures shall be maintained;

e. A program to identify and repair equipment and/or component group failures shall be maintained;

f. Systems for transmitting fire alarms to the local fire department shall be reliable and functional at all times;

g. There shall be operator and maintenance instructions for each piece of equipment and/or component group on the list;

h. Individuals shall be trained to operate and maintain all equipment and/or component group on the list; and

i. Portable fire extinguishers shall be clearly identified.
5. **Emergency Procedures Program (EPP).** There shall be written emergency procedures or a disaster management plan for utility system disruptions or failures which address the specific and concise procedures to follow in the event of a utility system malfunction or failure of the water supply, hot water system, medical gas system, sewer system, bulk waste disposal system, natural gas system, commercial power system, communication system, boiler or steam delivery system.

   a. These procedures shall be kept separate from all other policy and procedure manuals as to facilitate their rapid implementation.

   b. These procedures shall contain but are not limited to the following information:

      1. A method of obtaining alternative sources of essential utilities;
      2. A method of shutoff and location of valves for malfunctioning systems;
      3. A method of notification of hospital staff in affected areas; and

6. Policies and procedures shall include job descriptions and orientation practices for employees.

7. Policies and procedures shall have evidence of ongoing review and/or revision. The first page of each manual shall have the annual review date, signature of the department supervisor and/or person(s) conducting the review.

8. Relevant inservice educational programs shall be conducted on a regularly scheduled basis not less than six per year. There shall be evidence of program dates, attendance, and subject matter.

9. The department director shall ensure that all employees annually attend mandatory inservices on the fire safety, back safety, infection prevention and control, universal precautions, emergency procedures and disaster preparedness or make provisions to conduct these departmentally.

10. There shall be sufficient supervisory and support personnel to provide maintenance services in relation to the size and complexity of the facility and the services that are provided.

11. An ongoing QA/PI program with a liaison with the Infection Prevention and Control and Safety Committee.

C. **Environmental Services.**

1. The environmental services shall be under the direction of a person qualified by training and/or experience and licensed where required.

2. There shall be written policies and procedures which include:

   a. Cleaning of the physical plant;

   b. The use, care and cleaning of equipment;
c. Specific cleaning methods used for:
   1) Operating rooms;
   2) Delivery rooms;
   3) Nurseries/infant care units;
   4) Emergency rooms;
   5) Isolation areas; and
   6) Other units as appropriate.

d. Job descriptions;

e. Orientation practices;

f. Safety practices;

g. Infection prevention and control measures;

h. Methods used for evaluation of cleaning effectiveness;

i. Personal hygiene;

j. The selection of housekeeping and cleaning supplies; and

k. The proper use of housekeeping and cleaning supplies.

3. The policy and procedure manual shall have evidence of ongoing review and/or revision. The first page of each manual shall have the annual review date, signature of the department and/or person(s) conducting the review.

4. Relevant inservice educational programs shall be conducted on a regularly scheduled basis not less than six per year. There shall be written documentation with employee signatures, program title/subject, presenter, date and outline or narrative of presented program.

5. Expendable supplies (i.e., soap, paper products, etc.) shall be stored in a manner that shall prevent their contamination prior to use.

6. Solutions, cleaning compounds, disinfectants, vermin control chemicals, and all other potentially hazardous substances that are used in connection with environmental services shall be:

   a. Kept in containers which accurately reflect at least the following:

      1) Content name;
2) Concentration of solution; and

3) Expiration date and lot number;

b. Stored in a secured area. Under no circumstances shall these substances be stored in or near food storage or food preparation areas; and

c. Selected by the director of environmental services or other appointed qualified person. The Infection Prevention and Control Committee shall initially approve the list of chemicals used in the facility and thereafter, any additions or deletions to the list.

7. A designee from this department shall be a member of the Infection Prevention and Control Committee.

8. The use of common towels and common drinking utensils shall be prohibited.

9. Dry, or untreated dusting, sweeping, or mopping, except vacuum type cleaning shall be prohibited within the facility.

10. There shall be an ongoing QA/PI Program with a mechanism for reporting results.

D. Linen Services.

1. Laundry services shall be under the direction of a person qualified by training and/or experience and licensed where required.

2. There shall be sufficient support personnel to provide linen services in relation to the size and complexity of the facility and the services that are provided.

3. There shall be written policies and procedures which include:

   a. Collection of soiled, wet, and contaminated linen;

   b. Transporting of soiled, wet, and contaminated linen to the linen service or to a designated area for commercial pick-up;

   c. Storage of soiled, wet, and contaminated linen until laundering or being picked up by the commercial laundry;

   d. Storage of clean linen;

   e. Specific laundry requirements (type detergent, sours, bleach, time and temperatures used) for washing:

      1) New linen;

      2) Diapers; and

      3) Soiled, wet, and contaminated linen.

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f. Personal hygiene;
g. Evaluation of washing/cleaning effectiveness;
h. Job descriptions;
i. Orientation practices for new employees;
j. Safety practices; and
k. Infection prevention and control measures.

4. Policies and procedures for linen Services shall have evidence of ongoing review and/or revision. The first page of the manual shall have the annual review date, signature of the department supervisor and/or person(s) conducting the review.

5. Relevant inservice educational programs shall be conducted on a regularly scheduled basis not less than six per year. There shall be written documentation with employee signature, program title/subject, presenter, date and outline or narrative of presented program.

6. Facility linen service:
   a. Sorting of soiled laundry shall be done in a designated area;
   b. Tables or bins shall be provided for sorting of soiled laundry;
   c. Lint traps shall be provided on dryers and shall be cleaned regularly;
   d. Prerinising shall be done in the laundry service not in showers, bathtubs or lavatories;
   e. Removal of solid soil shall be done in soiled utility rooms or rooms that are designated for this purpose;
   f. Patient clothing may be washed in the patient area if a separate equipped laundry room is available;
   g. A rinsing sink shall be provided in the soiled linen area of the laundry;
   h. Hot water supplied to laundry areas shall be in accordance with Table 9 of the Appendix;
   i. Linen contained in hot water soluble plastic bags (identified as being contaminated) shall be placed directly into the washing machine without being removed from the bag for sorting;
   j. A lavatory equipped with wrist action controls, a soap dispenser and a towel dispenser shall be provided in the laundry for use by the personnel;
k. Personnel with infectious disease or open wounds shall not be permitted in the laundry; and

l. Personnel assigned to laundry duties shall wash their hands:

1) After handling wet or soiled laundry;
2) Before leaving the laundry;
3) After using the toilet; and
4) As often as is necessary to maintain good hygiene.

NOTE: Laundry equipment and installation requirements are set forth in Section 68, Physical Facilities, Linen Service.

7. Soiled linen from isolation areas, surgical cases, etc., shall be placed into impervious bags and, if leakage occurs, bagged into a second bag with proper identification. Suitable precautions shall be taken in transport, handling and processing.

8. Soiled, wet and contaminated linens shall be transported in a closed container.

9. Soiled, wet, and contaminated linens shall be stored in closed containers or impervious bags in designated areas off the floor. Areas for storage of soiled, wet, and contaminated linens shall have forced ventilation to the outside of the building.

10. All new clothing, linen and diapers shall be laundered before being used.

11. There shall be a designated area for the storage of clean linens.

12. The linen service within the facility shall have a capacity sufficient to process a continuous supply of clean laundry ready for use.

13. Temperature used in the dryer will depend on the type fabric. An employee shall be present at all times when the dryer is in operation.

14. There shall be an ongoing QA/PI Program with a mechanism for reporting results.

15. Linen Service shall include a written contingency plan indicating an alternative provision that may be followed in the event the laundry is unable to meet the production demand of the facility.

16. Separate containers for the disposal of infectious waste and sharps shall be located in the soiled linen sorting area.

17. Laundry workers handling infectious linens shall wear protective equipment, including but not limited to waterproof, puncture-resistant gloves, protective over-clothing and where necessary, face shields or goggles.

18. Facilities which do not have linen services:
a. The facility shall determine that all launderable items are processed in a commercial laundry in accordance with standards set forth in this section and shall conduct annual onsite inspections of the commercial laundry and shall require written verification of compliance by the laundry.

b. Soiled, wet, and contaminated laundry shall be stored in a designated area until pick up by the commercial laundry.

c. A designated clean area shall be provided for receiving clean laundry and shall be separate from the soiled linen area.

d. Clean linen shall be packaged and protected from contamination during transportation and storage.

19. Refer to Section 18, Infection Prevention and Control, for additional requirements.

E. Safety Services.

1. There shall be an effective program to enhance safety within the facility and grounds. The program shall be monitored by a Safety Committee appointed by the Administrator. Committee members may be selected from areas such as Administration, Nursing, Maintenance, Housekeeping, Laboratory, Respiratory Care, Rehabilitation Services, the Medical Staff and others as appropriate.

2. The Safety Committee shall meet a minimum four times per year to fulfill safety objectives. Minutes of each meeting shall be recorded and kept in the facility.

3. The Administrator shall designate a specific individual to carry out policies established by the Committee and to gather data for the Committee to study safety related incidents.

4. Safety policies and procedures shall have evidence of ongoing review and/or revision. The first page of each manual shall have the annual review date, signature of the department supervisor and/or person(s) conducting the review. Safety policies and procedures shall include:
   a. Facility wide hazard surveillance program;
   b. Response to medical-device recalls and hazard notices;
   c. Safety education;
   d. Reporting of all accidents, injuries, and safety hazards;
   e. External and internal disaster plans;
   f. Fire safety; and
   g. Safety devices and operational practices.

5. The orientation program for the facility shall include the importance of general safety, fire safety and the responsibility of each individual to the program.
6. The Safety Committee shall have the following functions:
   a. Monitoring the results of the safety program and analyzing the effectiveness of the program annually;
   b. Monitor fire drills and disaster drills;
   c. Conclusions, recommendations and actions of the committee shall be reported to the Board at a minimum annually; and
   d. Ensuring each department or service shall have a safety policy and procedure manual within their own area that is a part of the overall facility safety manual and establishes safety policies and procedures specific to each area.

7. Fire extinguishers shall be provided in adequate numbers, of the correct type, and shall be properly located and installed. Personnel shall be trained in the proper use of fire extinguishers and equipment. Personnel shall follow procedures in fire containment and evacuating patients in case of fire or explosion. There shall be an annual check of all fire extinguishers by qualified persons in accordance with the applicable sections of the National Fire Protection Association's Standard 10 (NFPA 10). The date the check was made and the initials of the inspector shall be recorded on the fire extinguisher or on a tag attached to the extinguisher.

8. Any fire or disaster event at the facility shall be reported immediately to the Arkansas Department of Health by telephone 501-661-2201 during regular working hours or 501-661-2136 after normal working hours, holidays and weekends. If any fire(s) or disaster is not reported to the Department, the facility is subject to a fine, refer to item J. of Section 4, Licensure and Codes.

9. There shall be policies and procedures governing the routine methods of handling and storing flammable and explosive agents, particularly in operating rooms, delivery rooms, laundries and in areas where oxygen therapy is administered.

10. There shall be keys available to assure prompt access to all locked areas. All doors shall be devised so they can be opened from the inside of the locked area. Special door locking devices are acceptable in limited areas. Usage is subject to all codes and regulations.

11. All required exit doors shall remain unlocked per NFPA requirements.

12. A list of Material Safety Data Sheets (MSDS) for solutions, cleaning compounds, disinfectants, vermin control chemicals and other potentially hazardous substances used in connection with the facility shall be readily available to the Safety Committee, Emergency Room, Environmental Services and as directed by facility policy and procedures.
SECTION 47: PHYSICAL FACILITIES.

A. General Considerations.

1. The requirements set forth herein have been established by the Department and constitute minimum requirements for the design, construction, renovation, and repair of facilities requiring licensure under these regulations rules.

2. Facilities shall be accessible to the public, staff, and patients with physical disabilities. Minimum requirements shall be those set forth by the Arkansas State Building Services, Minimum Standards and Criteria - Accessibility for the Physically Disabled Standards.

3. Projects involving existing facilities shall be programmed and phased to minimize disruption of the existing functions. Access, exits and fire protection shall be maintained for the occupant's and the facility's safety.

4. Codes and Standards. Nothing stated herein shall relieve the owner from compliance with building codes, ordinances, and regulations which are enforced by city, county, or other State jurisdictions. Where such codes, ordinances, and regulations are not in effect, the owner shall consult the state building codes for all components of the building type which are not specifically covered by these minimum requirements. In location where there is a history of tornadoes, floods, earthquakes or other regional disasters, planning and design shall consider the need to protect the occupants and the facility.

B. Occupancy: Each licensed facility or portion of a licensed facility shall be classified as indicated below:

1. General Hospital: A facility or portion of a facility licensed by the Department as a General Hospital that provide for patient care, treatment, or diagnosis on a 24 hour basis and provides treatment or anesthesia for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others.

2. Mobile, Transportable, and Relocatable Unit: A portion of a facility licensed by the Department that meets the definitions provided in Section 58 for mobile, transportable, and relocatable units.

3. Freestanding Ambulatory Surgery Center: A facility or portion of a facility licensed by the Department as a Freestanding Ambulatory Surgery Center that provides patient care, treatment, or diagnosis on a less than 24 hour basis and also provides treatment or anesthesia for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others.

4. Outpatient Care Facility: A portion of a facility licensed by the Department that provides patient care, treatment, or diagnosis on a less than 24 hour basis and does not provide treatment or anesthesia for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others. Outpatient care facilities may be utilized on occasion by hospital inpatients provided that such use is limited to a less than 24 hour basis.
5. Rehabilitation Facility: A facility or portion of a facility licensed by the Department as a Rehabilitation Facility.

6. Psychiatric Hospital: A facility or portion of a facility licensed by the Department as a Psychiatric Hospital.

7. Alcohol/Drug Abuse Treatment Center: A facility or portion of a facility licensed by the Department as an Alcohol/Drug Abuse Treatment Center.

8. Infirmary: A facility or portion of a facility licensed by the Department as an Infirmary.

9. Non-Healthcare Occupancy: A portion of a licensed facility that does not contain areas intended for patient care, treatment, or diagnosis and does not contain equipment (mechanical, electrical, plumbing, communication, fire alarm, etc.) that serves areas intended for patient care, treatment, or diagnosis.

C. Multiple Occupancy: Facilities may contain more than one occupancy (as described above) provided each different occupancy is separated from all other occupancies by a 2-hour fire resistive rated smoke barrier.

D. Construction Projects: Each construction project shall be classified as indicated below:

1. Addition: A project that increases the floor area of a licensed facility.

2. Repair: A project that provides for the repair or renewal of a licensed facility or portion of a licensed facility solely for the purpose of its maintenance.

3. Simple Renovation: A project other than repair that meets all of the criteria listed below:
   a. The project does not increase the floor area of a licensed facility.
   b. The project does not change the occupancy of a licensed facility or portion of a licensed facility.
   c. The project does not involve more than two (2) smoke compartments.
   d. The smoke compartments affected by the project were completely protected by an automatic sprinkler system prior to the project or the project provides for the installation of a complete automatic sprinkler system in all smoke compartments that are affected by the project.

4. Complex Renovation: A project other than Addition, Repair, or Simple Renovation.

E. Applicable Requirements Based upon Occupancy:

1. Existing Facilities: Existing facilities that do not comply with these regulations shall be permitted to continue in service, provided the lack of conformity with these regulations does not present a serious hazard to the occupants as determined by Health Facility Services or other authorities having jurisdiction.
2. General Hospital: Facilities or portions of facilities classified as a General Hospital occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.
   a. Sections 46
   b. Section 47
   c. Sections 48 through 57
   d. Sections 57 through 78

3. Mobile, Transportable, and Relocatable Unit: Facilities or portions of facilities classified as a Mobile, Transportable, and Relocatable Unit occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.
   a. Sections 46
   b. Section 47
   c. Section 58

4. Freestanding Ambulatory Surgery Center: Facilities or portions of facilities classified as Freestanding Ambulatory Surgery Center occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.
   a. Sections 46
   b. Section 47
   c. Section 79

5. Outpatient Care Facility: Facilities or portions of facilities classified as an Outpatient Care Facility occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.
   a. Sections 46
   b. Section 47
   c. Section 80

6. Rehabilitation Facility: Facilities or portions of facilities classified as an Outpatient Care Facility occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.
a. Sections 46
b. Section 47
c. Section 81

7. Psychiatric Hospital: Facilities or portions of facilities classified as a Psychiatric Hospital occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.

a. Sections 46
b. Section 47
c. Section 82

8. Alcohol/Drug Abuse Treatment Center: Facilities or portions of facilities classified as an Alcohol/Drug Abuse Treatment Center occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.

a. Sections 46
b. Section 47
c. Section 82

9. Infirmary Occupancies: Portions of facilities classified as an Infirmary occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.

a. Sections 46
b. Section 47
c. Section 83

10. Non-Healthcare Occupancy Facilities or portions of facilities classified as a Non-Healthcare occupancy shall be designed, constructed, and renovated in accordance with the Sections of these regulations listed below and all publications and Appendices referenced by these Sections.

a. Sections 46
b. Section 47

F. Applicable Requirements Based upon the Type of Project:

1. General:

   a. Where renovation work is done within an existing facility, all new work, or additions, or both, shall comply, insofar as practical with applicable sections of
these regulations rules and appropriate sections of National Fire Protection Association (NFPA) 101 Life Safety Code covering new occupancies. Where major structural elements make total compliance impractical or impossible, exceptions will be considered.

b. In renovation projects and projects involving additions to existing facilities, only that portion of the total facility affected by the project shall comply with applicable sections of these regulations rules and with appropriate parts of NFPA 101 covering new occupancies. Existing portions of the facility that are not included in the project but essential to the functioning of a complete facility shall comply (at a minimum) with the appropriate sections of NFPA 101 covering existing occupancies. Existing portions of the facility that receive less then substantial amounts of new work, shall also comply (at a minimum) with the appropriate sections of NFPA 101 covering existing occupancies.

c. Facilities or portions of facilities shall be permitted to be occupied during construction, renovation, and repair only where required means of egress and required fire protection features are in place and continuously maintained for the portion occupied or where alternate life safety measures acceptable to Health Facility Services and other authorities having jurisdiction are in place.

2. Addition, Simple Renovation, and Complex Renovation shall be designed, constructed, and renovated in accordance with the applicable Sections of these regulations rules and all Appendices and publications referenced by these Sections.

3. Repair projects shall be designed and constructed in a manner that does not diminish the safety level that existed prior to the start of the work.

G. Project Review and Approval Process.

1. Coordination: Health Facilities Services will coordinate the review and approval process for all offices of the Department.

2. Addition or Complex Renovation Projects
   a. Drawing Review and Approval Process:
      1) Submission of Plan Review Fee: A plan review fee in the amount of one percent of the total cost of construction or $500.00, whichever is less, shall be paid for the review of plans and specifications. The plan review fee check is to be made payable to Arkansas Department of Health. A detailed estimate shall accompany the plans unless the maximum fee of $500.00 is paid.
      2) Submission of Functional Program: Refer to Section 47, Paragraph H.
      3) Submission of Site Location: Refer to paragraph Section 47, Paragraph I.
      4) Submission of Preliminary Plans: Refer to Section 47, Paragraph J.
5) Review of Functional Program, Site Location, and Preliminary Plans: Health Facility Services shall review the Functional Program, Site Location, and Preliminary Plans and forward a written response with comments to the Facility.

6) Submission of Final Construction Documents: Refer to Section 47, Paragraph K.

7) Review and Approval of Final Construction Documents: Health Facility Services shall review the Final Construction Documents and forward a written response with comments to the Facility and the Design Professional. Health Facility Services shall have a minimum of six (6) weeks to review Final Construction Documents. The written response shall indicate whether or not the Final Construction Documents are approved. If the Final Construction Documents are not approved, the written response shall indicate the design modifications required to secure approval.

8) Plans may be certified by a Licensed Architect or Professional Engineer with respect to compliance with the applicable codes, rules, and standards.

b. Approval to Begin Construction: Facilities may proceed with Addition and Complex Renovation projects after receiving a letter from Health Facility Services stating that the Final Construction Documents have been reviewed and approved and after receiving approval from other authorities having jurisdiction.

c. Site Inspections During Construction: Refer to Section 47, Paragraph L.

d. Final Site Inspection: Refer to Section 46, Paragraph M.

3. Repair: Repair projects do not require Health Facility Services review and approval.

4. Simple Renovation Projects submitted to Health Facility Services shall be reviewed and approved by Health Facility Services as indicated below:

a. Drawing Review and Approval Process:

1) Submission of Plan Review Fee: A plan review fee in the amount of one percent of the total cost of construction or $500.00, whichever is less, shall be paid for the review of plans and specifications. The plan review fee check is to be made payable to the Arkansas Department of Health. A detailed estimate shall accompany the plans unless the maximum fee of $500.00 is paid.

2) Submission of Functional Program: Refer to Section 47, Paragraph H.

3) Submission of Final Construction Documents: Refer to Section 47, Paragraph K.

4) Review and Approval of Final Construction Documents: Health Facility Services shall review the Final Construction Documents and forward a
written response with comments to the Facility. Health Facility Services shall have a minimum of six (6) weeks to review Final Construction Documents. The written response shall indicate whether or not the Final Construction Documents are approved. If the Final Construction Documents are not approved, the written response shall indicate the design modifications required to secure approval.

5) Plans may be certified by a Licensed Architect or Professional Engineer with respect to compliance with the applicable codes, rules, and standards.

b. Approval to Begin Construction: Facilities may proceed with Simple Renovation projects after receiving a letter from Health Facility Services stating that the Final Construction Documents have been reviewed and approved and after receiving approval from other authorities having jurisdiction.

c. Site Inspections During Construction: Refer to Section 47, Paragraph L.

d. Final Site Inspection: Refer to Section 47, Paragraph M.

H. Functional Program.

The facility shall supply for each project (other than a repair project) a functional program that describes the purpose of the project and indicates the estimated cost of construction.

I. Site Location.

1. Location
   a. The site of any medical facility should be easily accessible to the community and to service vehicles such as fire protection apparatus.
   b. Facilities should be located with due regard to the accessibility by public transportation for patients, staff, and visitors, and availability of competent medical and surgical consultation.
   c. The facility should have security measures for patients, personnel, and the public consistent with the conditions and risks inherent in the location of the facility. These measures shall include a program designed to protect human and capital resources.
   d. The facility should be located to provide reliable utilities (water, natural gas, sewer and electricity).
   e. The site should afford good drainage and shall not be subject to flooding nor be located near insect breeding areas, excessive noise, nor other nuisance producing locations, nor near airports, railways, air pollution, penal institutions (except prison infirmaries), or a cemetery.

2. Roads and Parking.
   a. Paved roads and walks shall be provided within the lot lines to provide access to
the main entrance and service entrance, including loading and unloading docks for delivery trucks. Hospitals having an organized emergency services department shall have the emergency entrance well marked to facilitate entry from the public roads or streets serving the site. Access to the emergency entrance shall not conflict with other vehicular traffic or pedestrian traffic. Paved walkways shall be provided for necessary pedestrian traffic.

b. Each facility shall have parking spaces to satisfy the minimum needs of patients, employees, staff, and visitors. In the absence of a formal parking study, each facility shall provide not less than one space for each day shift staff member and employee plus one space for each patient bed. This ratio may be reduced in an area convenient to a public transportation system or to a public parking facility if proper justification is given and provided that approval of any reduction is obtained from the Department. Additional parking shall be required to accommodate outpatient and other services when they are provided. Space shall be provided for emergency and delivery vehicles.

3. Subsoil Investigation. Subsoil investigation shall be made to determine the subsurface soil and water conditions. The investigation shall include a sufficient number of test pits or test borings to determine, in the judgment of the architect and the structural engineer, the true subsurface conditions. Results of the investigation shall be available in the form of a soil investigation report or a foundation engineering report. The investigation shall be made in close cooperation with the architect and structural engineer and shall contain detailed recommendations for foundation design and gradings. The following is a general outline of the suggested scope of soil investigation:

a. The borings or test pits shall extend into stable soils well below the bottom of any proposed foundations. A field log of the borings shall be made and the thickness, consistency, and character of each layer recorded;

b. The amount and elevation of groundwater encountered in each pit or boring and its probable variation with the seasons and effect on the subsoil shall be determined. High or low water levels of nearby bodies of water affecting the ground level shall also be determined;

c. Laboratory tests shall be performed to determine the safe bearing value and compressibility characteristics of the various strata encountered in each pit or boring;

d. Maximum depth of frost penetration below surface of the ground shall be recorded;

e. Tests shall be made to determine whether the soil contains alkali in sufficient quantities to affect concrete foundations;

4. Approval. The new building site shall be inspected and approved by the Department before construction begins.

J. Preliminary Plans: Preliminary plans submitted to Health Facility Services shall include as a minimum the following information:

1. Floor plans drawn to scale that indicate room names, room dimensions, corridor
dimensions, locations of fire resistive rated partitions, and locations of rated smoke barriers.

2. An existing floor plan indicating existing spaces and exits and their relationship to the new construction (renovation projects only).

3. Building sections that establish the proposed construction type and fire rating. Sections shall be drawn at a scale sufficiently large to clearly present the proposed construction system.

4. A site plan that indicates the location of proposed roads, walks, service and entrance courts, parking, and orientation.

5. Simple horizontal and vertical space diagrams that indicate the relationship of various departments and services to each other the general room arrangement in each department.

6. A narrative description of proposed mechanical, electrical, and fire protection systems.

K. Final Construction Documents.

1. Construction Documents shall be prepared by an architect and/or professional engineer licensed by the State of Arkansas.

2. Architectural construction documents shall be prepared by an architect and engineering construction documents (structural, mechanical, electrical, and civil) shall be prepared by a qualified engineer. The documents shall be stamped with appropriate seals for each discipline.

3. Periodic observations of construction shall be provided and documented by each design professional. Design professionals shall verify that the construction is in accordance with the construction documents and that the Record Drawings are properly maintained.

4. The construction contract shall contain a provision to withhold progress payments to the contractor until the Record Drawings are current.

5. Final Construction Documents shall include drawings and specifications. Separate drawings and specifications shall be prepared for each of the following branches of work: architectural, structural, mechanical, electrical, life safety and fire protection.

6. The drawings shall include the following information:

   a. Architectural.

      1) Approved plan showing all new 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 planted. All structures and improvements removed under the construction contract. A print of the survey shall be included in the Contract Documents.

      2) Plan of each floor, roof, and all intermediate levels.

      3) Elevations of each exterior wall.
4) Sections through building.
5) Scale details as necessary to properly indicate portions of the work.
6) Schedule of finishes.

b. Equipment.

1) Large scale drawings of typical and special rooms indicating all fixed equipment and major items of furniture and movable equipment.
2) The furniture and movable equipment not included in the construction contract shall be indicated by dotted lines.

c. Structural.

1) Plans of foundations, floors, roofs, and all intermediate levels shall show a complete design with sizes, sections, and the relative location of the various members and schedule of beams, girders, and columns.
2) Dimensional floor levels, column centers and offsets.
3) Special openings.
4) Details of all special connections, assemblies, and expansion joints.
5) Name of the governing building code.

d. Mechanical.

1) Heating, piping, and air-conditioning systems:
   a) Steam heated equipment, such as sterilizers, warmers, and steam tables;
   b) Heating and steam mains and branches with pipe sizes;
   c) Diagram of heating and steam risers with pipe sizes;
   d) Sizes, types, and heating surfaces of boilers and oil burners, if any;
   e) Pumps, tanks, boiler breeching and piping, and boiler room accessories;
   f) Air-conditioning systems with required equipment, water piping, refrigerant piping, and ductwork indicating required fire smoke/dampers;
   g) Air quantities for all room supply, return, and exhaust ventilating duct openings;
h) A ventilation schedule specifying the following information: Room number, room name, room volume (ft³), required room air changes, required outside air changes, required air movement relative to adjacent area, required air filtration (% efficiency), required room total supply air quantity (cubic feet per minute (CFM)), required outside air quantity (CFM), required room exhaust air quantity (CFM), design room total supply air quantity (CFM), design room return air quantity (CFM), design outside air quantity (CFM), design room exhaust air quantity (CFM), design room air filtration (% efficiency), room design summer (°F) dry bulb/wet bulb (DB/WB), room design winter (°F) DB/WB, outside air design summer (°F) DB/WB, and outside air design winter (°F) DB/WB; and

i) Air filter design pressure drop (both clean and dirty).

2) Plumbing, drainage, and standpipe systems:

   a) Size and elevation of street sewer, house sewer, house drains, and street water main;

   b) Locations and size of soil, waste, and vent stacks with connections to house drains, clean outs, fixtures and equipment;

   c) Size and location of hot and cold circulating mains, branches, and risers from the service entrance and tanks;

   d) Riser diagram to show all plumbing stacks with vents, water risers, and fixture connections;

   e) Gas, oxygen, and special connections;

   f) Standpipe and sprinkler systems; and

   g) Plumbing fixtures and equipment that require water and drain connections;

3) Elevators and dumbwaiters: Details and dimensions of shaft, pit and machine room, pit sumps with alarms when required, sizes of car platform and doors.

4) Kitchens, laundry, refrigeration, and laboratories detailed at a satisfactory scale (1/4 inch scale) to show the location, size, and connection of all fixed and moveable equipment.

e. Electrical.

1) All electrical wiring, outlets, smoke detectors, and equipment which require electrical connections;
2) Electrical service entrance with switches, and feeders to the public service feeders, characteristics of the light and power current and transformers and their connections, if located in the building;

3) Plan and diagram showing main switchboard power panels, light panels and equipment. Diagram of feeder and conduit sizes with a schedule of feeder breakers or switches;

4) Light outlets, receptacles, switches, power outlets, and circuits;

5) Telephone layout showing service entrance, telephone switchboard, terminal boxes, and telephone outlets; Nurse call systems with outlets for beds, nurses stations, door signal lights, annunciators, and wiring diagrams;

6) Staff paging and doctor's in-and-out registry systems with all equipment wiring, if provided;

7) Fire alarm and/or security system with stations, signal devices, control board, and wiring diagrams;

8) Emergency electrical system with outlets, transfer switch, source of supply, feeders, and circuits;

9) Medical gas alarm systems; and

10) All other electrically operated systems and equipment.


1) Limits of each smoke compartment;

2) Location of each smoke barrier wall;

3) Dimensions and gross areas of each smoke compartment;

4) Location of each fire rated wall or partition, fire separation wall and horizontal exit;

5) Location of each exit sign, fire pull station, and extinguisher cabinet and extinguisher; and

6) Travel distance(s) from the most remote location(s) in the building to an exit as defined by NFPA 101 (i.e., horizontal exit, exit passageway, enclosed exit stair, exterior exit door).

g. Specifications: Specifications shall supplement the drawings to fully describe types, sizes, capacities, workmships, finishes, and other characteristics of all materials and equipment and shall include the following:
1) Cover or title sheet with architectural seal;

2) Index;

3) General conditions;

4) General requirements;

5) Sections describing material and workmanship in detail for each class of work.

h. All construction documents and specifications shall be approved by the Department prior to the beginning of construction and a letter shall be issued from the licensing agency granting approval to commence with construction. The Department shall have a minimum of six (6) weeks to review construction documents and specifications. Health Facility Services shall coordinate the plan review with other Divisions in the Department. Penalties for starting construction without Department approval see Section 4, Licensure and Codes.

L. Site Inspection During Construction. The Department shall inspect the project during the construction process as indicated below:

1. This Department is to be notified when construction begins and a construction schedule shall be submitted to determine inspection dates.

2. Representatives from the Department shall have access to the construction premises and the construction project for purposes of making whatever inspections deemed necessary throughout the course of construction.

3. Any deviation from the accepted construction documents shall not be permitted during construction, until the written request for change(s) in the construction is approved by this Department.

M. Final Site Inspection.

1. Upon completion of construction and prior to the approval by the Department to occupy and use the facility, the owner shall be furnished a complete set of record drawings and a complete set of installation, operation, and maintenance manuals and parts lists for the installed equipment.

2. A list of final site inspection items has been provided in Section 84, Table 5.

3. No facility shall occupy any new structure or major addition or renovation space until the appropriate permission has been received from the local building and fire authorities and licensing agency.

N. Referenced Publications.

1. General: These regulations rules include references to other codes and standards.
The most current codes and standards adopted at the time of this publication are used. Later issues will normally be acceptable where requirements for function and safety are not reduced; however, editions of different dates may have portions renumbered or re-titled. Care shall be taken to ensure that appropriate sections are used.

2. Publications adopted in whole by these regulations are as listed below:
   c. Arkansas Building Authority, Minimum Standards and Criteria - Accessibility for the Physically Disabled Standards.
   f. National Council on Radiation Protection (NCRP), Radiation Protection Design Guidelines for 0.1pi29100, MeV Particle Accelerator Facilities.

3. Publications adopted in part (only the sections specifically identified by these regulations are applicable) by these regulations are as listed below:
   a. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), "Handbook of Fundamentals" and "Handbook of Applications."
   b. American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), Standard 52, "Method of Testing Air Cleaning Devices Used in General Ventilation for Removing Particulate Matter."

4. A partial list of other publications that are applicable to the design and construction of healthcare facilities that are not a part of these regulations but may be enforced by other authorities having jurisdiction is provided below:

b. Arkansas State Mechanical Code, Arkansas Department of Health.


d. Arkansas Boiler Code, Arkansas Department of Labor.

5. Publications that are not a part of these regulations but potentially helpful as reference material in the design and construction of healthcare facilities are as listed below:


O. Availability of Codes and Standards. Referenced publications can be ordered, if they are Government publications, from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402. Copies of non-government publications can be obtained at the addresses listed below.

1. Air Conditioning and Refrigeration Institute, 1501 Wilson Boulevard, Arlington, VA 22209.


3. American Society of Civil Engineers, 345 East 47th Street, New York, NY 10017


5. American Society of Heating, Refrigerating, and Air Conditioning, 1741 Tullie Circle, NE, Atlanta GA 30329.

6. Arkansas Building Authority, 1515 West 7th Street, Suite 700, Little Rock, AR 72201.

7. Arkansas Department of Labor, 10421 West Markham, Little Rock, AR 72205.

8. Illuminating Engineering Society of North America (IESNA), 120 Wall Street, 17th Floor, New York, NY 10005.


10. National Fire Protection Association, 1 Batterymarch Park, Post Office Box 9101, Quincy, MA 02269-9101.

P. Interpretations of Requirements.

1. Memorandum of Understanding: Conflicts between the Arkansas Fire Prevention Code and NFPA 101 Life Safety Code are to be resolved using the Memorandum of Understanding as indicated below:
   a. The Arkansas Fire Prevention Code is the fire prevention code for the State of Arkansas.
   c. Requirements found only in the Arkansas Fire Prevention Code (requirements not addressed by NFPA 101) may be provided at the option of the facility (compliance with these requirements is not mandatory).

2. Safety Improvement Plans: Nothing in these regulations shall be construed as restrictive to a facility that chooses to do work as a part of a long-range safety improvement plan. These regulations do not prohibit a single phase of improvement. All hazards to life and safety all areas of noncompliance should be corrected as soon as possible.

3. Provisions in Excess of Regulatory Requirements: Nothing in these regulations shall be construed to prohibit a better type of building construction, an additional means of egress, or an otherwise safer condition than that specified by the minimum requirements of these regulations.

4. Equivalency:
   a. Insofar as practical, these minimum standards have been established to obtain a desired performance result. Prescriptive limitations, when given, such as exact minimum dimensions or quantities, describe a condition that is recognized as a practical standard for normal operation.
   b. It is the intent of these regulations to permit and promote equivalency concepts. Nothing in these regulations shall be construed as restricting innovations that provide an equivalent level of performance with these regulations in a manner other than that which is prescribed by these regulations, provided that no other safety element or system is compromised in order to establish equivalency.
   c. Health Facility Services may approve alternate methods, procedures, design criteria, and functional variations from these regulations, because of extraordinary circumstances, new programs, new technology, or unusual conditions when the facility can effectively demonstrate that the intent of the regulations is met and that the variation does not reduce the safety or operational effectiveness of the facility below that required by the exact language of the regulations.
d. When contemplating equivalency allowances, Health Facility Services may use a variety of expert sources to make equivalency findings. Health Facility Services will document the reasons for approval or denial of equivalency to the facility.

e. National Fire Protection Association (NFPA) document 101A is a technical standard for evaluating equivalency to certain Life Safety Code 101 requirements. The Fire Safety Evaluation System (FSES) is a widely recognized method for establishing a safety level equivalent to the Life Safety Code. The use of the FSES process may be useful for evaluating existing facilities that will be affected by renovation.
RULES FOR HOSPITALS AND RELATED INSTITUTIONS IN ARKANSAS 2020
06/13/19

SECTION 48: PHYSICAL FACILITIES, PATIENT ACCOMMODATIONS (ADULT MEDICAL, SURGICAL, COMMUNICABLE OR PULMONARY DISEASE).

NOTE: See other sections of this document for Special-Care area units such as Postanesthesia Care Unit, Critical Care Units, Rehabilitation Units, Pediatric Units, Postpartum Care Units and/or other specialty units.

A. Patient Rooms. Each patient room shall meet the following requirements.

1. Maximum room capacity shall be two patients.

2. In new construction, patient rooms shall have a minimum of 100 square feet of clear floor area per bed in semi-private rooms and 120 square feet of clear floor area for single-bed rooms, exclusive of toilet rooms, closets, lockers, wardrobes, alcoves or vestibules. The dimensions and arrangement of rooms shall be such that there is a minimum of three feet between the sides and foot of the bed and any wall, other fixed obstruction or another bed. In semi-private bed rooms, a clearance of four feet shall be available at the foot of each bed to permit the passage of equipment and beds. Minor encroachments, including columns and lavatories, that do not interfere with functions may be ignored when determining space requirements for patient rooms. Where renovation work is undertaken, every effort shall be made to meet the above minimum standards.

3. Each patient room shall have a window with outside exposure and where the operation of windows or vents requires the use of tools or keys, such devices shall be on the same floor and easily accessible to staff. The windowsills shall not be higher than three feet above the floor and shall be above the grade. Patient rooms in new construction intended for 24 hour occupancy shall have windows. If operable windows are installed, such devices shall be permanently secured or restricted to inhibit possible escape or suicide.

4. Nurse patient communication station shall be provided in accordance with item G of Section 76, Physical Facilities, Electrical Standards.

5. Handwashing stations shall be provided to serve each patient room. These handwashing stations shall be located in the toilet room.

6. Each patient shall have access to a toilet room without having to enter the general corridor area. One toilet room shall serve no more than four patient beds and no more than two patient rooms. In new construction, an additional handwashing station or sanitizing station shall be placed in the patient room where the toilet room serves more than one bed. The toilet room shall contain a water closet and a handwashing station and the door shall swing outward or be double acting.

7. Each patient shall have within the room a separate wardrobe or closet that is suitable for hanging full length garments and for storing personal items.

8. Visual privacy from casual observation by other patients and visitors shall be provided for each patient in semi-private rooms with cubicle curtains or equivalent built-in or movable dividers. Provisions for privacy is not required within psychiatric or alcohol and
drug units. The method for providing privacy shall not obstruct passage of other patients either to the entrance, toilet or lavatory. All curtains shall have a flame spread of 0 to 25 and shall comply with NFPA 13 requirements for clear space below sprinklers.

9. Each room shall communicate directly with a corridor without passage through another patient's room.

10. Rooms existing partially below grade level shall not be used for patients unless they are dry, well ventilated and are otherwise suitable for occupancy.

11. Beds shall be arranged to provide adequate room for all patient care procedures and to prevent the transmission of infections.

12. Individual approved hospital type beds shall be provided. Bed rails shall be provided on beds for children.

13. A reading light shall be provided for each patient bed. The location and design shall be such that the light is not annoying to other patients.

14. A bedside table with drawer shall be provided for each bed. The lower portion of the table and/or enclosed shelves shall be provided for individual nursing care equipment.

B. Service Areas. Each services area may be arranged and located to serve more than one nursing unit but at least one such service area shall be provided on each nursing floor. Some of the service areas may be combined in a single space. The following service areas shall be located in or readily available to each nursing unit:

1. Nursing Station. Facilities for charting, clinical records, work counter, communication system, space for supplies and convenient access to handwashing stations shall be provided. It may be combined with or include centers for reception and communication.

2. Dictation area shall be provided. This area shall be adjacent to but separate from the nurses’ station;

3. Toilet room(s) for staff convenient to nurses’ station (may be unisex).

4. Lounge facilities for staff. These facilities may be on another floor.

5. Individual closets or compartments for the safekeeping of coats and personal effects of nursing personnel. These shall be located convenient to the nurses' station of personnel or in a central location.

6. Multi-purpose room(s) for staff, patients, patients' families, patient conferences, reports, education, training sessions, and consultation. The rooms shall be accessible to each nursing unit. One such room may serve several nursing units and/or departments.

7. Examination/treatment room(s). Such rooms may be omitted if all patient rooms are single-bed rooms. It shall have a minimum floor area of 120 square feet excluding space for vestibule, toilet, closets, and work counters (whether fixed or movable). Centrally located examination and treatment room(s) may serve more than one nursing unit on the
same floor. The room shall contain a lavatory or sink equipped for handwashing, work
counter, storage facilities, and a desk, counter or shelf space for writing. The emergency
treatment room may be used for this purpose if it is conveniently located to the patient
rooms.

8. Clean workroom or clean supply room. If the room is used for preparing patient care
items, it shall contain a work counter, a handwashing fixture and storage facilities for
clean and sterile supplies. If the room is used only for storage and holding as part of a
system for distribution of clean and sterile materials, the work counter and handwashing
fixture may be omitted. Soiled and clean workrooms or holding rooms shall be separated
and have no direct connection.

9. Soiled workroom or soiled holding room. This room shall be separate from the clean
workroom. The soiled workroom shall contain a clinical sink (or equivalent flushing-rim
fixture). The room shall contain a lavatory (or handwashing fixture). The above fixtures
shall both have a hot and cold mixing faucet. The room shall have a work counter and
space for separate covered containers for soiled linen and waste. Rooms used only for
temporary holding of soiled material may omit the clinical sink and work counter. If the
flushing-rim clinical sink is eliminated, facilities for cleaning bedpans shall be provided
elsewhere.

10. Medication Station. Provisions shall be made for distribution of medications. This may
be done from a medicine preparation room or unit, from a self-contained medicine
dispensing unit, or by another approved system.

a. Medicine preparation room. This room shall be designed to allow for visual
supervision by the nursing staff. It shall contain a work counter, a sink adequate
for handwashing, refrigerator, and locked storage for controlled drugs. When a
medicine preparation room is to be used to store one or more self-contained
medicine dispensing units, the room shall be designed with adequate space to
prepare medicines with the self-contained medicine dispensing unit(s) present.

b. Self-contained medicine dispensing unit. A self-contained medicine dispensing
unit may be located at the nurses' station, in the clean workroom or in an alcove,
provided the unit has adequate security for controlled drugs and adequate lighting
to easily identify drugs. Convenient access to handwashing stations shall be
provided. (Standard cup-sinks provided in many self-contained units are not
adequate for handwashing.)

11. Clean Linen Storage. A separate closet or a designated area within the clean workroom
shall be provided. If a closed cart system is used, storage may be in an alcove. Carts
shall be out of the path of traffic.

12. Nourishment Station. This shall contain a sink equipped for handwashing, equipment for
serving nourishment between scheduled and unscheduled meals, refrigerator, storage
cabinets and ice maker units to provide ice for patients' service and treatment. Ice for
human consumption shall be from self-dispensing units. Handwashing stations shall be
in or immediately accessible to the nourishment station.

13. Equipment Storage Room. This shall be for equipment such as I.V. stands, inhalators, air
mattresses and walkers.
14. Parking for stretchers and wheelchairs. This shall be located out of path normal traffic.

15. Showers and bathtubs. When individual bathing facilities are not provided in patient rooms, there shall be at least one shower and/or bathtub for each 12 beds without such facilities. Each bathtub or shower shall be in an individual room or enclosure that provides privacy for bathing, drying, and dressing. Special bathing facilities, including space for attendant, shall be provided for patients on stretchers, carts, and wheelchairs at the ratio of one per 100 beds or a fraction thereof. This may be on a separate floor if convenient for use.

16. Emergency Equipment Storage. Space for emergency equipment such as a “crash cart” shall be provided and shall be under control of the nursing staff.

17. Environmental Services Closet. See Section 69, Physical Facilities, Cleaning and Sanitizing Carts and Environmental Services, for detailed requirements.

C. Airborne Infection Isolation Room(s). Rooms for patients who are suffering from infections shall be provided at the rate of 1 for each 30 beds or fraction thereof. These may be located within each nursing unit or placed together in a separate unit. See also Section 49, Physical Facilities, Critical Care Unit for the requirements of Critical Care Units. Psychiatric and Alcohol/Drug Unit(s) beds need not be included in the bed count ratio to establish the number of rooms. Each isolation room shall be a single-bed room and planned as required for a normal patient room except as follows:

1. Each airborne infection isolation room shall have an area for handwashing, gowning, and storage of clean and soiled materials located directly outside the entry door to the patient room.

2. Airborne infection isolation room perimeter walls, ceiling and floors, including penetrations, shall be sealed tightly so that air does not infiltrate the environment from the outside or from other spaces.

3. Airborne infection isolation room(s) shall have self-closing devices on all room exit doors.

4. Separate toilet, bathtub (or shower) and handwashing stations are required for each airborne infection isolation room.

5. Airborne infection isolation rooms may be used for noninfectious patients when not needed for patients with airborne infectious disease.

6. Windows shall not be operable without the use of a key or tool controlled by the nursing staff.

7. Each room shall have a permanently installed visual mechanism to constantly monitor the pressure status of the room when occupied by patients with an airborne infectious disease.

D. Protective Isolation Rooms. In facilities where procedures such as organ transplants, burn therapy, and immunosuppressive treatments are performed, special design provisions, including special ventilation, may be necessary to meet the needs of the functional program. Refer to Table
4 of the Appendix for air pressure and ventilation. Each protective isolation room shall be a single-bed room and planned as required for a normal patient room except as follows:

1. Each protective isolation room shall have an anteroom for handwashing, gowning and storage of clean and soiled materials located directly outside the entry door to the patient room.

2. Protective isolation room perimeter walls, ceiling and floors, including penetrations, shall be sealed tightly so that air does not infiltrate the environment from the outside or from other spaces.

3. Protective isolation room(s) shall have self-closing devices on all room exit doors.

4. Separate toilet, bathtub (or shower) and handwashing stations are required for each protective isolation room.

5. Protective isolation rooms may be used for nonimmunosuppressed patients, except airborne infectious patients are prohibited.

6. Windows shall not be operable without the use of a key or tool controlled by the nursing staff.

E. Seclusion Rooms. Each hospital shall provide one or more single-bed rooms for patients needing close supervision if suitable psychiatric facilities are not available elsewhere in the community. Such rooms shall comply with the applicable requirements in Section 52, Physical Facilities, Psychiatric Nursing Unit.

F. Observation Rooms. Patients in observation status may be accommodated within the facility:

1. In private, semi-private or multi-patient rooms. Furniture shall be arranged to provide adequate room for patient care procedures and to prevent the transmission of infection;

2. Cubicle curtains, privacy screens or an approved equivalent shall be provided for patient privacy in all multi-patient rooms. The utilization of such curtains or screens shall be such that each patient shall have privacy;

3. Each room or cubicle shall be provided with (a) oxygen; (b) vacuum; and (c) a nurse call button unless direct observation is afforded and maintained;

d. Hand hygiene facilities shall be available within the area;

e. Hospital grade furniture shall be provided. Bed rails shall be provided on beds;

f. For each area in which a patient bed is utilized, a reading light shall be provided for each bed. The location and design shall be such that the light is not annoying to other patients;

g. Patient toilets shall be provided and accessible to all patients; and
h. Adequate space shall be provided for medical supplies.
SECTION 49: PHYSICAL FACILITIES, CRITICAL CARE UNIT.

The Critical care units require special space and equipment considerations for effective staff functions. In addition, space arrangement shall include provisions for immediate access of emergency equipment from other departments. Critical care units shall comply in size, number and type with these standards and with the functional program. The following standards are intended for the more common types of critical care services and shall be appropriate to needs defined in functional programs. Where specialized services are required, additions and/or modifications shall be made as necessary for efficient, safe, and effective patient care.

A. Critical Care (General). The following shall apply to all types of critical care units unless otherwise noted. Each unit shall comply with the following provisions:

1. The location shall offer direct access by the emergency, respiratory care, laboratory, radiology, surgery, and other essential departments and services as defined by the functional program. It shall be located so that the medical emergency resuscitation teams may be able to respond promptly to emergency calls within minimum travel time. The location shall be arranged to eliminate the need for through traffic.

2. In new construction, where elevator transport is required for critically ill patients, the size of the cab and mechanisms and controls shall meet the specialized needs.

3. In new construction, each patient room (or multiple bed space for neonatal or pediatric units) shall have a minimum of 200 square feet of clear floor area with a minimum headwall width of 13 feet per bed, exclusive of anterooms, vestibules, toilet rooms, closets, lockers, wardrobes and/or alcoves.

In renovation of existing critical care units, every effort shall be made to meet the above minimum standards. If it is not possible to meet the above square foot standards, the Entity having jurisdiction may grant approval to deviate from this requirement. In such cases, rooms shall be no less than 130 square feet.

4. View panels to the corridor shall be required and shall have means to provide visual privacy. Where only one door is provided to a bed space, it shall be at least four feet wide and arranged to minimize interference with movement of beds and large equipment. Sliding doors shall not have floor tracks and shall have hardware that minimizes jamming possibilities. Where sliding doors are used for access to cubicles within a suite, a three foot wide swinging door may also be provided for personnel communication. The sliding doors shall swing out.

5. Each patient bed area shall have space at each bedside for visitors and provisions for visual privacy from casual observation by other patients and visitors. For both adult and pediatric units, there shall be a minimum of eight feet between beds.

6. Each patient bed shall have visual access, other than skylights, to the outside environment with not less than one outside window in each patient bed area. In renovation projects, clerestory windows with windowsills above the heights of adjacent ceilings may be used, provided they afford patients a view of the exterior and are equipped with appropriate forms of glare and sun control. Distance from the patient bed to the outside window shall...
not exceed 50 feet. When partitioned cubicles are used, patients' view to outside windows may be through no more than two separate clear vision panels.

7. Nurse/patient communication shall be provided in accordance with item G. of Section 76, Physical Facilities, Electrical Standards. The communication station for the unit shall include provisions for an emergency code resuscitation alarm to summon assistance from outside the critical care unit.

8. Handwashing fixtures shall be convenient to nurse stations and patient bed areas. There shall be at least one handwashing fixture for every three beds in open plan areas, and one in each patient room. The handwashing fixture or sanitizing station shall be located near the entrance to the patient cubicle or room, shall be sized to minimize splashing water onto the floor, and shall be equipped with hands-free operable controls.

9. Nurses' station shall have space for counters and storage. It may be combined with or include centers for reception and communication. There shall be direct or remote visual observation between the nurses' station and all patient beds in the critical care unit.

10. Each unit shall contain equipment for continuous monitoring, with visual displays for each patient at the bedside and at the nurses' station. Monitors shall be located to permit easy viewing and access but not interfere with access to the patient.

11. Emergency equipment storage space that is easily accessible to the staff shall be provided for emergency equipment such as an emergency cart.

12. Medication Station. Provisions shall be made for distribution of medications. This may be done from a medicine preparation room or unit, from a self-contained medicine dispensing unit, or by another approved system:
   a. Medicine preparation room. This room shall be designed to allow for visual supervision by the nursing staff. It shall contain a work counter, a sink adequate for handwashing, refrigerator and locked storage for controlled drugs. When a medicine preparation room is to be used to store one or more self-contained medicine dispensing units, the room shall be designed with adequate space to prepare medicines with the self-contained medicine dispensing unit(s) present.
   b. Self-contained medicine dispensing unit. A self-contained medicine dispensing unit may be located at the nurses' station, in the clean workroom, or in an alcove, provided the unit has adequate security for controlled drugs and adequate lighting to easily identify drugs. Convenient access to handwashing stations shall be provided. (Standard cup-sinks provided in many self-contained units are not adequate for handwashing.)

13. At least one airborne infection isolation room shall be provided. The number of airborne infection isolation rooms shall be determined based on an infection prevention and control risk assessment; as per the primary catchment area by the facility. Each room shall contain only one bed and shall comply with the requirements of item C of Section 48, Physical Facilities, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease). However, the requirement for the bathtub (or shower) may be eliminated. Compact, modular toilet/sink combination units may replace
the requirement for a “toilet room.” Special ventilation requirements are found in Table 4.

14. The following additional service spaces shall be immediately available within each critical care area (Note: These additional spaces may be shared by more than one critical care unit provided that direct access is available from each unit):

a. Securable closets or cabinet compartments for the unit personnel; eliminated. Compact, modular toilet/sink combination units may replace the requirement for a “toilet room.” Special ventilation requirements are found in Table 4.

b. Clean workroom or clean supply room. If the room is used for preparing patient care items, it shall contain a work counter, a handwashing fixture and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as part of a system for distribution of clean and sterile supply materials, the work counter and handwashing fixture may be omitted. Soiled and clean workrooms or holding rooms shall be separated and have no direct connection;

c. Clean linen storage. There shall be a designated area for clean linen storage. This may be within the clean workroom, a separate closet or an approved distribution system on each floor. If a closed cart system is used, storage may be in an alcove. It shall be out of the path of normal traffic and under staff control;

d. Soiled workroom or soiled holding room. This room shall be separate from the clean workroom. The soiled workroom shall contain a clinical sink or equivalent flushing-rim fixture. The room shall contain a lavatory or handwashing fixture. The above fixtures shall have a hot and cold mixing faucet. The room shall have a work counter and space for separate covered containers for soiled linen and a variety of waste types. Rooms used only for temporary holding of soiled material may omit the clinical sink and work counter. If the flushing-rim clinical sink is eliminated, facilities for cleaning bedpans shall be provided elsewhere;

e. Nourishment Station. There shall be a nourishment station with sink, work counter, refrigerator, storage cabinets and equipment for hot and cold nourishments between scheduled meals. The nourishment station shall include space for trays and dishes used for nonscheduled meal service. Provisions and space shall be included for separate temporary storage of unused and soiled dietary trays not picked up at mealtime. Handwashing stations shall be in or immediately accessible from the nourishment station;

f. Ice machine. There shall be available equipment to provide ice for treatments and nourishment. Ice-making equipment may be in the clean workroom or at the nourishment station. Ice intended for human consumption shall be from self-dispensing icemakers;

g. Equipment storage room or alcove. Appropriate room(s) or alcove(s) shall be provided for storage of large items of equipment necessary for patient care and as required by the functional program. Its location shall not interfere with the flow of traffic; and
h. X-ray viewing equipment.

15. The following shall be provided and may be located outside the unit if conveniently accessible.

a. A visitors' waiting room shall be provided with access to telephones and toilets. One waiting room may serve several critical care units.

b. Staff lounge(s) and toilet(s) shall be located so that staff may be recalled quickly to the patient area in emergencies. The lounge shall have telephone or intercom and emergency code alarm connections to the critical care unit it serves. One lounge may serve adjacent critical care areas.

c. A special procedures room shall be provided if required by the functional program.

d. Multipurpose room(s) for staff, patients and patients' families for patient conferences, reports, education, training sessions and consultation shall be provided. These rooms shall be accessible to each nursing unit.

e. A housekeeping room shall be provided within or immediately adjacent to the critical care unit. It shall not be shared with other nursing units or departments. It shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment.

f. Storage space for stretchers and wheelchairs shall be provided in a strategic location, without restricting normal traffic.

g. Laboratory, radiology, respiratory care and pharmacy services shall be available. These services may be provided from the central departments or from satellite facilities as required by the functional program.

B. Coronary Critical Care Unit. In addition to the standards set forth in Section 49, Physical Facilities, Critical Care Unit, the following standards apply to the coronary critical care unit:

1. Each coronary patient shall have a separate room for acoustical and visual privacy.

2. Each coronary patient shall have access to a toilet in the room. (Portable commodes may be used in lieu of individual toilets, but provisions shall be made for their storage, servicing and odor control.)

C. Pediatric Critical Care. If a facility has a specific pediatric critical care unit, the functional program shall include consideration for staffing, isolation and the safe transportation of critically ill pediatric patients, along with life support and environmental systems, from other areas. In addition to the standards previously listed for critical care units, each pediatric critical care unit shall include:

1. Space at each bedside for family, visitors and nursing staff;
2. In new construction, each patient space (whether separate rooms, cubicles or multiple bed space) shall have a minimum of 200 square feet of clear floor area with a minimum headwall width of 13 feet per bed, exclusive of anterooms, vestibules, toilet rooms, closets, lockers, wardrobes and/or alcoves;

3. Consultation/demonstration room within, or convenient to, the pediatric critical care unit for private discussions;

4. Provisions for formula storage. These may be outside the pediatric critical care unit but shall be available for use at all times;

5. Separate storage cabinets or closets for toys and games for use by the pediatric patients; and

6. Examination and treatment room(s).

D. Newborn Intensive Care Units. Each Newborn Intensive Care Unit (NICU) shall include or comply with the following:

1. The NICU shall have a clearly identified entrance and reception area for families. The area shall permit visual observation and contact with all traffic entering the unit. A scrub area shall be provided at each public entrance to the patient care area(s) of the NICU. All sinks shall be hands-free operable and large enough to contain splashing;

2. At least one door (44 inches minimum) to each room in the unit to accommodate portable X-ray equipment;

3. There shall be controlled access systems to the unit from the Labor and Delivery area, the Emergency Room or other referral entry points;

4. When viewing windows are provided, provision shall be made to control casual viewing of infants;

5. Noise control shall be a design factor;

6. Provisions shall be made for indirect lighting in all nurseries. Provisions shall be made for multiple lighting levels;

7. A central area shall serve as a nurses' station, shall have space for counters and storage, and shall have convenient access to handwashing stations. It may be combined with or include centers for reception and communication and patient monitoring;

8. Each patient care space shall contain a minimum of 120 square feet per bassinette excluding sinks and aisles. There shall be an aisle for circulation adjacent to each patient care space with a minimum width of three feet;

9. An airborne infection isolation room is required in at least one level of nursery care. The room shall be enclosed and separated from the nursery unit with provisions for observation of the infant from adjacent nurseries or control area(s);
10. Blood gas lab facilities shall be immediately accessible;

11. A respiratory care work area and storage room shall be provided;

12. A consultation/demonstration/breast feeding room shall be provided convenient to the unit;

13. Charting and dictation space for physicians shall be provided;

14. Medication station shall be provided;

15. Clean workroom or clean supply room shall be provided. See Section 48 B.8, Physical Facilities, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease);

16. Soiled workroom or soiled holding room shall be provided. See Section 48 B.9, Physical Facilities, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease);

17. A lounge, locker room and staff toilet within or adjacent to the unit suite for staff use shall be provided;

18. Space shall be provided for emergency equipment that is under direct control of the nursing staff, such as an emergency cart. This space shall be located in an area appropriate to the functional program, but out of normal traffic;

19. One environmental service closet shall be provided for the unit. It shall be directly accessible from the unit and be dedicated for the exclusive use of the neonatal critical care unit. It shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment; and

20. Space shall be provided for the following:
   a. A visitors' waiting room;
   b. Nurses' station; and
   c. Multipurpose room(s) for staff, patients and patients' families for patient conferences, reports, education, training sessions and consultation. These rooms shall be accessible to each nursing unit. They may be on other floors if convenient for regular use. One such room may serve several nursing units and/or departments.
SECTION 50: PHYSICAL FACILITIES, NURSERY UNITS.

Normal newborn infants shall be housed in nurseries that comply with the standards below. All nurseries other than pediatric nurseries shall be convenient to the postpartum nursing unit and obstetrical facilities. The nurseries shall be located and arranged to preclude the need for nonrelated pedestrian traffic. No nursery shall open directly into another nursery. There should be one breastfeeding/pumping room readily available for mothers of NICU babies to pump breastmilk.

A. General. Each nursery shall contain the following:

1. At least one lavatory, equipped with hands-free handwashing station, for each eight infant stations;

2. Glazed observation windows to permit the viewing of infants from public areas, workrooms and adjacent nurseries;

3. Convenient, accessible storage for linens and infant supplies at each nursery room;

4. A consultation/demonstration/breast feeding or pump room shall be provided convenient to the nursery. Provision shall be made, either within the room or conveniently located nearby, for sink, counter, refrigeration and freezing, storage for pump and attachments and educational materials. The area provided for the unit for these purposes, when conveniently located, may be shared;

5. Enough space shall be provided for parents to stay 24 hours;

6. An airborne infection isolation room is required in or near at least one level of nursery care. The room shall be enclosed and separated from the nursery unit with provisions for observation of the infant from adjacent nurseries or control area(s). All airborne infection isolation rooms shall comply with the requirements of Section 48.C, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease), except for separate toilet, bathtub or shower;

7. Workroom(s). Each nursery room shall be served by a connecting workroom. The workroom shall contain scrubbing and gowing facilities at the entrance for staff and housekeeping personnel, work counter, refrigerator, storage for supplies and a hands-free handwashing fixture. One workroom may serve more than one nursery room provided that required services are convenient to each. The workroom serving the full-term and continuing care nurseries may be omitted if equivalent work and storage areas and facilities, including those for scrubbing and gowing, are provided within that nursery. Space required for work areas located within the nursery is in addition to the area required for infant care. Adequate provision shall be made for storage of emergency cart(s) and equipment out of traffic and for the sanitary storage and disposal of soiled waste.

a. When the functional program includes a mother-baby couplet approach to nursing care, the workroom functions described above may be incorporated in the nurse station that serves the postpartum patient rooms.
b. Neonate examination and treatment areas. Such areas, when required by the functional program, shall contain a work counter, storage facilities and a hands-free handwashing station.

c. Neonate formula facilities. Where infant formula is prepared on-site, direct access from the formula preparation room to any nursery room is prohibited. The room may be located near the nursery or at other appropriate locations in the hospital, but shall include

1) Cleanup facilities for washing and sterilizing supplies. This area shall include a handwashing station, facilities for bottle washing, a work counter and sterilization equipment.

2) Separate room for preparing infant formula. This room shall contain warming facilities, refrigerator, work counter, formula sterilizer, storage facilities and a handwashing station.

3) Refrigerated storage and warming facilities for infant formula accessible for use by nursery personnel at all times.

8. Commercial neonate formula. If a commercial infant formula is used, the separate cleanup and preparation rooms may be omitted. The storage and handling may be done in the nursery workroom or in another appropriate room in the hospital that is conveniently accessible at all hours. The preparation area shall have a work counter, a handwashing station and storage facilities.

9. Housekeeping/environmental services room. A housekeeping/environmental services room shall be provided for the exclusive use of the nursery unit. It shall be directly accessible from the unit and shall contain a service sink or floor receptor and provide for storage of supplies and housekeeping equipment.

10. Charting space. Charting facilities shall have linear surface space to ensure that staff and physicians may chart and have simultaneous access to information and communication systems.

B. Newborn Nursery

1. Each newborn nursery room shall contain no more than 16 stations. The minimum floor areas shall be 24 square feet per bassinet, exclusive of auxiliary work areas. When a rooming-in program is used, the total number of bassinets provided in these units may be appropriately reduced, but the newborn nursery shall not be omitted in its entirety from any facility that includes delivery services. (When facilities use a rooming-in program in which all infants are returned to the nursery at night, a reduction in nursery size may not be practical.)

2 Baby holding nurseries may replace traditional nurseries with baby holding nurseries in postpartum and labor-delivery-recovery-postpartum (LDRP) units. The minimum floor area per bassinet, ventilation, electrical, and medical vacuum and gases shall be the same as that required for a full-term nursery. These holding nurseries should be next to the nurse station on these units. The holding nursery shall be sized to accommodate the percentage of newborns who do not remain with their mothers during the postpartum stay.
C. Continuing Care Nursery

For hospitals that provide continuing care for infants requiring close observation (for example, low birth-weight babies who are not ill but require more hours of nursing than do normal neonates), the minimum floor space shall be 50 square feet (4.65 square meters) per bassinet, exclusive of auxiliary work areas, with provisions for at least 4 feet (1.22 meters) between and at all sides of each bassinet.

D. Pediatric Nursery

To minimize the possibility of cross infection, each nursery room serving pediatric patients shall contain no more than eight bassinets; each bassinet shall have a minimum clear floor area of 40 square feet (3.72 square meters). Each room shall contain a lavatory equipped for hands-free handwashing, a nurses emergency calling system and a glazed viewing window for observing infants from public areas and workrooms. (Limitation on number of patients in a nursery room does not apply to the pediatric critical care unit.)
SECTION 51: PHYSICAL FACILITIES, PEDIATRIC AND ADOLESCENT UNIT.

The unit shall meet the following standards:

A.  Patient Rooms. Each patient room shall meet the following standards:

1.  Maximum room capacity shall be four patients.

2.  The space requirements for pediatric patient beds shall be the same as for adult beds due to the size variation and the need to change from cribs to beds and vice-versa. See Section 48, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease), for requirements. Additional provisions for hygiene, toilets, sleeping, and personal belongings shall be included where the program indicates that parents will be allowed to remain with young children. See Sections 49, Physical Facilities, Critical Care Unit and 50, Physical Facilities, Newborn Nursery Units for pediatric critical care units and for newborn nurseries.

3.  Each patient room shall have a window in accordance with Section 48, Physical Facilities, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease).

B.  Examination/Treatment Rooms. This room shall be provided for pediatric and adolescent patients. A separate area for infant examination and treatment may be provided within the pediatric nursery workroom. Examination/treatment rooms shall have a minimum floor area of 120 square feet. The room shall contain a handwashing fixture, storage facilities, a desk, counter or shelf space for writing. This room is not required if all rooms are private.

1.  Multipurpose or individual room(s) shall be provided within or adjacent to areas serving pediatric and adolescent patients for dining, education and developmentally appropriate play and recreation, with access and equipment for patients with physical restrictions. If the functional program requires, an individual room shall be provided to allow for confidential parent/family comfort, consultation and teaching. Insulation, isolation and structural provisions shall minimize the transmission of impact noise through the floor, walls or ceiling of these multipurpose room(s).

2.  Space for preparation and storage of infant formula shall be provided within the unit or other convenient location. Provisions shall be made for continuation of special formula that may have been prescribed for the infant prior to admission or readmission.

3.  Patient toilet room(s) with handwashing station(s) in each room, in addition to those serving bed areas, shall be conveniently located to multipurpose room(s) and to each central bathing facility.

4.  Storage closets or cabinets for toys and educational and recreational equipment shall be provided.

5.  Storage space shall be provided to permit exchange of cribs and adult beds. Provisions shall also be made for storage of equipment and supplies (including cots or recliners, extra linen, etc.) for parents who stay with the patient overnight.
6. A least one airborne infection isolation room shall be provided in each pediatric unit. The total number of infection isolation rooms shall be determined by an infection prevention and control risk assessment. Airborne infection isolation room(s) shall comply with the requirements of item C. of Section 48, Physical Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease).

7. Separate clean and soiled workrooms or holding rooms shall be provided as described in Section 48 B.8 and B.9, Physical Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease).
SECTION 52: PHYSICAL FACILITIES, PSYCHIATRIC NURSING UNIT.

When part of a general hospital, these units shall be designed for the care of inpatients. Non-ambulatory inpatients may be treated in a medical unit until their medical condition allows for transfer to the psychiatric nursing unit. Provisions shall be made in the design for adapting the area for various types of psychiatric therapies.

The environment of the unit should be characterized by a feeling of openness with emphasis on natural light and exterior views. Various functions should be accessible from common areas while not compromising desirable levels of patient privacy. Interior finishes, lighting and furnishings should suggest a residential rather than an institutional setting. These should, however, conform with applicable fire safety codes. Security and safety devices should not be presented in a manner to attract or challenge tampering by patients.

Where glass fragments pose a hazard to certain patients, safety glazing and/or other appropriate security features shall be used.

Details of such facilities should be as described in the approved functional program. Each nursing unit shall provide the following:

A. Patient Rooms. The patient room requirements noted in Section 48, Physical Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease), shall be applied to patient rooms in psychiatric nursing units except as follows:

1. A nurses' call system is not required; but if it is included, provisions shall be made for easy removal or for covering call button outlets;

2. Bedpan-flushing devices shall be omitted from patient room toilets;

3. Handwashing stations are not required in patient rooms;

4. Visual privacy in multi-bed rooms (e.g., cubicle curtains) is not required;

5. The ceiling and the air distribution devices, lighting fixtures, sprinkler heads, and other appurtenances shall be of a tamper-resistant type;

6. Each patient room shall be provided with a private toilet that meets the following requirements:

   a. The door shall not be lockable from within;
   
   b. The door shall be capable of swinging outward; and
   
   c. The ceiling shall be of tamper-resistant construction and the air distribution devices, lighting fixtures, sprinkler heads and other appurtenances shall be of the tamper-resistant type.

7. Patient rooms, exclusive of toilet rooms, closets, lockers, wardrobes, alcoves, or vestibules, shall be at least 100 square feet for single-bed rooms and 80 square feet per
bed for multiple-beds rooms. The dimensions and room arrangement criteria of Section 48 does not apply.

B. Service Areas. The standards noted in Section 48, Physical Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease), shall apply to services areas for psychiatric nursing units with the following modifications:

1. A secured storage area shall be provided for patients' belongings that are determined to be potentially harmful (e.g., razors, nail files, cigarette lighters); this area shall be controlled by staff;

2. Medication station shall include provisions for security against unauthorized access;

3. Food service within the unit may be one, or a combination, of the following:
   a. A nourishment station;
   b. A kitchenette designed for patient use with staff control of heating and cooking devices; and
   c. A kitchen service within the unit including a handwashing station, storage space, refrigerator and facilities for meal preparation.

4. Storage space for stretchers and wheelchairs may be outside the psychiatric unit, provided that provisions are made for convenient access as needed for disabled patients;

5. In psychiatric nursing units, a bathtub or shower shall be provided for each six beds not otherwise served by bathing facilities within the patient rooms. Bathing facilities shall be designed and located for patient convenience and privacy;

6. A separate charting area shall be provided with provisions for acoustical privacy. A viewing window to permit observation of patient areas by the charting nurse or physician may be used if the arrangement is such that patient files cannot be read from outside the charting space;

7. At least two separate social spaces, one appropriate for noisy activities and one for quiet activities shall be provided. The combined area shall be a minimum of 40 square feet per patient with a minimum of 120 square feet for each of the two spaces. This space may be shared by dining activities;

8. Space for group therapy shall be provided. This may be combined with the quiet space noted above in item 7 when the unit accommodates not more than 12 patients, and when at least 225 square feet of enclosed private space is available for group therapy activities;

9. Patient laundry facilities with an automatic washer and dryer shall be provided.

The following elements shall also be provided, but may be either within the psychiatric unit or immediately accessible to it unless otherwise dictated by the functional program:
10. Rooms (s) for examination and treatment with a minimum floor area of 120 square feet. Examination and treatment room(s) for medical-surgical patients may be shared by the psychiatric unit patients. (These may be on a different floor if conveniently accessible.)

11. Separate consultation room(s) with minimum floor space of 100 square feet each, provided at a room-to-bed ratio of one consultation room for each 12 psychiatric beds. The room(s) shall be designed for acoustical and visual privacy and constructed to achieve a noise reduction of at least 45 decibels. This room is not required if all rooms are private;

12. Psychiatric units each containing 15 square feet of separate space per patient for patient therapy/multipurpose use, with a minimum total area of at least 200 square feet, whichever is greater. Space shall include provision for handwashing, work counter(s), storage, and displays. This space may serve more than one nursing unit. When psychiatric nursing unit(s) contain less than 12 beds, the therapy and other functions may be performed within the noisy activities area, if at least an additional 10 square feet per patient served is included; and

13. A conference and treatment planning room for use by the psychiatric unit.

C. Seclusion Treatment Room. There shall be at least one seclusion room for up to 24 beds or a major fraction thereof. If a facility has more than one psychiatric nursing unit, the number of seclusion rooms shall be a function of the total number of psychiatric beds in the facility. Seclusion rooms may be grouped together.

1. The seclusion room is intended for short-term occupancy by a violent or suicidal patient. The room(s) shall be located for direct nursing staff supervision. Each room shall be for only one patient. It shall have an area of at least 60 square feet and shall be constructed to prevent patient hiding, escape, injury or suicide. Where restraint beds are required by the functional program, 80 square feet shall be required.

2. Room doors shall be designed with hardware that will permit the doors to swing out. Outside corners shall be omitted where possible. The ceiling shall be of tamper-resistant construction and the air distribution devices, lighting fixtures, sprinkler heads, and other appurtenances shall be of the tamper-resistant type. The walls shall be completely free of objects. Special fixtures and hardware for electrical circuits shall be used. Minimum ceiling height shall be nine feet. Doors shall be three feet eight inches wide and shall permit staff observation of the patient while also maintaining provisions for patient privacy. Seclusion treatment rooms shall be accessed by an anteroom or vestibule which also provides direct access to a toilet room. The toilet room and anteroom shall provide for safe management of the patient.

3. Where the interior of the seclusion room is padded with combustible materials, these materials shall be of a type acceptable to NFPA standards. The room area, including floor, walls, ceilings and all openings shall be protected with not less than one-hour-rated construction.
SECTION 53: PHYSICAL FACILITIES, SURGICAL FACILITIES.

The Surgical Suite shall be located and arranged to preclude unrelated traffic through the Suite. The Surgical Suite shall be designed in accordance with NFPA 99 except that, within suites, mixed facilities as defined in NFPA 99 shall not be allowed. The Suite(s) shall provide the following elements.

A. General Operating Room(s). At least one general operating room shall be provided for each 50 beds or major fraction thereof up to 200 beds. Over 200 beds, additional operating room needs shall be based on the projected surgical workload. In new construction, each room shall have a minimum clear area of 400 square feet exclusive of fixed or wall-mounted cabinets and built-in shelves, with a minimum of 20 feet clear dimension between fixed cabinets and built-in shelves, and a system for emergency communication with the surgical suite control station. X-ray film illuminators for handling at least four films simultaneously shall also be provided. In renovation projects, every effort shall be made to meet the floor space requirements indicated above. In no event shall the clear floor area be less than 360 square feet with a minimum dimension of 18 feet.

B. Specialty Operating Rooms for cardiovascular, orthopedic, neurological, and other procedures that require additional personnel and/or large equipment. When included, this room shall have, in addition to the above requirements for general operating rooms, a minimum clear area of 600 square feet, with a minimum of 20 feet clear dimension exclusive of fixed or wall-mounted cabinets and built-in shelves. When open-heart surgery is performed, an additional room in the restricted area of the surgical suite shall be designated as a pump room where extra corporeal pump(s), supplies and accessories are stored and serviced. When complex orthopedic and neurosurgical surgery is performed, additional rooms shall be in the restricted area of the surgical suite which shall be designated as equipment storage rooms for the large equipment used to support these procedures. Appropriate plumbing, medical gases and electrical connections shall be provided in the pump storage room. When included, a room for orthopedic surgery shall, in addition to the above, have enclosed storage space for splints and traction equipment. Storage outside the operating room shall be conveniently located. If a sink is used for the disposal of casting material, an appropriate trap shall be provided. In renovation projects, every effort shall be made to meet the floor space requirements indicated above. In no event shall the clear floor area be less than 400 square feet (except for Orthopedic procedures shall be 360 square feet) with a minimum dimension of 18 feet.

C. Room(s) for Surgical Cystoscopic and Endo-Urologic Procedures. When provided and/or required by the written functional program, the cystoscopic and endo-urologic procedures room(s) shall follow these requirements. A scrub sink or large lavatory shall be provided within or adjoining the cystoscopy room. In new construction, these rooms shall have a minimum clear area of 350 square feet, exclusive of fixed or wall-mounted cabinets and built-in shelves with a minimum of 15 feet clear dimension between fixed cabinets and built-in shelves. Additional clear space may be required by the functional program to accommodate special functions in one or more of these rooms. An emergency communications system shall connect with the Surgical Suite control station. Facilities for the disposal of liquid wastes shall be provided. If a floor drain is installed to provide for disposal of liquid wastes, it shall be completely insulated from ground by means of an insulating type floor drain and nonconductive waste connections. The drain shall also be provided with a flushing device. X-ray viewing capability to accommodate at least four films simultaneously shall be provided. In renovation projects, every effort shall be made to meet the clear floor space requirements indicted above for construction. In no event shall the clear floor space be less than 250 square feet.
D. Endoscopy

The endoscopy suite may be divided into three major functional areas: the procedure room(s), instrument processing room(s), and patient holding/preparation and recovery room or area.

NOTE: When invasive procedures are to be performed in this unit on persons who are known or suspected of having airborne infectious diseases, these procedures should not be performed in the operating suite. These procedures shall be performed in a room meeting airborne infections isolation ventilation requirements or in a space using local exhaust ventilation.

1. Procedures Room(s)
   a. Each procedure room shall have a minimum clear area of 200 square feet (15.58 square meters) exclusive of fixed cabinets and built-in shelves.
   b. A freestanding handwashing fixture with handsfree controls shall be available in the suite.
   c. Refer to Table 10 for medical gas station outlets.
   d. Floor covering shall be monolithic and joint free.
   e. A system for emergency communication shall be provided.
   f. Procedure rooms shall be designed for visual and acoustical privacy for the patient.

2. Instrument Processing Room(s)
   a. Dedicated processing room(s) for cleaning and disinfecting instrumentation shall be provided. In an optimal situation, cleaning room(s) shall be located between two procedure rooms. However, one processing room may serve multiple procedure rooms. Size of the cleaning room(s) is dictated by the amount of equipment to be processed.

   Cleaning rooms shall allow for flow of instrumentations from the contaminated area to the clean area, and finally to storage. The clean equipment rooms, including storage, should protect the equipment from contamination.
   b. The decontamination room shall be equipped with the following:
      1) Two utility sinks remote from each other.
      2) One freestanding handwashing fixture.
      3) Work counter space(s).
      4) Space and plumbing fixtures for automatic endoscope cleaners, sonic processor, and flash sterilizers (where required).
5) Ventilation system. Negative pressure shall be maintained and minimum of 10 air changes per hour shall be maintained. A hood is recommended over the work counter. All air shall be exhausted to the outside to avoid recirculation within the facility.

6) Outlets for vacuum and compressed air.

7) Floor covering shall be monolithic and joint free.

3. Patient Holding/Prep/Recovery Area. The following elements shall be provided in this area:
   a) Each patient cubicle shall be equipped with oxygen and suction outlets.
   b) Cubicle curtains for patient privacy.
   c) Medication preparation and storage with handwashing stations.
   d) Toilet facilities (may be accessible from patient holding or directly from procedure room(s) or both).
   e) Change areas and storage for patients’ personal effects.
   f) Nurses reception and charting area with visualization of patients.
   g) Clean utility room or area.
   h) Environmental Services closet.

E. Service Areas. Individual rooms shall be provided when so noted; otherwise alcoves or other open spaces which shall not interfere with traffic may be used. Services, except the soiled workroom and the janitor's closet, may be shared with and organized as part of the obstetrical facilities if the approved functional program reflects this sharing concept. Service areas shall be arranged to avoid direct traffic between the Operating and Delivery Suites. The following areas shall be provided.

1. Control station located to permit visual surveillance of all traffic which enters the Operating Suite.

2. A supervisor's office or station. The number of offices, stations, and teaching areas in the surgical suite shall depend upon the functional program.

3. Sterilizing facilities conveniently located to serve all operating rooms. The sterilizing facility shall have work counter space and a handwashing sink. When the functional program indicates that adequate provisions have been made for replacement of sterile instruments during surgery, sterilization facilities in the Surgical Suite shall not be required.

4. Medication Distribution. Provisions shall be made for storage and distribution of medications. This may be done from a medication preparation room or unit, from a self-contained medication dispensing unit, or by another system approved by the Department.
If used, a medication preparation room or unit shall be under visual control of nursing staff. It shall contain a work counter, sink, refrigerator, and double-locked storage for controlled substances with convenient access to handwashing stations provided. Each blood bank refrigerator shall be on an emergency power circuit.

5. Scrub Facilities. Two scrub stations shall be provided near the entrance to each operating room; however two scrub stations may serve two operating rooms if the scrub stations are located adjacent to the entrance of each operating room. Scrub facilities shall be arranged to minimize any incidental splatter on nearby personnel or supply carts. In new construction, view windows at scrub stations permitting observation of room interiors shall be provided. The scrub sinks shall be recessed into an alcove out of the main traffic areas. Equipment and supplies for timed scrub technique shall be available at each scrub sink with manual and/or automatic two way controls.

6. Soiled Workroom. An enclosed soiled workroom (or soiled-holding room that is part of a system for the collection and disposal of soiled material) for the exclusive use of the surgical suite shall be provided. It shall be located in the restricted area. The soiled workroom shall contain a flushing-rim clinical sink or equivalent flushing-rim fixture, a work counter, a handwashing fixture, and space for waste receptacles, and soiled linen receptacles. Rooms used only for temporary holding of soiled material may omit the flushing-rim clinical sink and work counters. However, if the flushing-rim clinical sink is omitted, other provisions for disposal of liquid waste shall be provided. This room shall not have direct connection with operating rooms or other sterile activity rooms. Soiled and clean work or holding rooms shall be separated.

7. Clean Workroom or a Clean Supply Room. A clean workroom is required when clean materials are assembled within the surgical suite prior to use, or following the decontamination cycle. It shall contain a work counter, a handwashing fixture, storage for clean supplies, and space to package reusable items. The storage for sterile supplies shall be separated from this space. If the room is used only for storage and holding as part of a system for distribution of clean and sterile supply materials, the work counter and handwashing fixture may be omitted. Storage space for sterile and clean supplies shall be adequate for the functional plan. The space shall be moisture and temperature controlled and free from cross traffic.

8. The location of sterilization for surgical instruments and the direction of flow from the decontamination location to the sterile location shall be addressed by the written functional program.

a. An operating room suite design with a sterile core shall provide for no cross traffic of staff and supplies from the decontaminated/soiled areas to the sterile/clean areas.

b. The use of facilities outside the operating room for soiled/decontaminated processing and clean assembly and sterile processing shall be designed to move the flow of goods and personnel from dirty to clean/sterile without compromising standard precautions or aseptic techniques in both departments. This room shall have no direct opening into an operating room.

9. Anesthesia storage shall be provided in accordance with NFPA 99.
10. Medical gas storage facilities. Main storage of medical gases may be outside or inside
the facility in accordance with NFPA 99. Provision shall be made for additional separate
storage of reserve gas cylinders necessary to complete at least one day’s procedures.

11. An anesthesia workroom for testing and storing anesthesia equipment shall contain a
work counter, sink and racks for cylinders.

12. Equipment storage room(s) for equipment and supplies used in the Surgical Suite. Each
surgical suite shall provide sufficient storage area to keep the exit access corridor free of
equipment and supplies, but not less than 150 square feet or 50 square feet per OR,
whichever is greater.

13. Staff Dressing Room. Appropriate room(s) shall be provided for males and females
working within the Surgical Suite. The room(s) shall contain lockers, showers, toilets,
lavatories equipped for handwashing, and space for donning scrub suits and boots. These
room(s) shall be arranged to provide a one-way traffic pattern so personnel entering from
outside the Surgical Suite can change, shower, gown, and move directly into the Surgical
Suite.

14. Stretcher storage area out of direct line of traffic.

15. Staff lounge and toilet facilities. Separate or combined lounges for males and females
shall be provided. Lounge(s) shall be located to permit use without leaving the Surgical
Suite and to provide convenient access to the Recovery Room.

16. Dictation and report preparation area. This may be accessible from the lounge area.

17. Phase II recovery. Where outpatient surgeries are to be part of the surgical suite, and
where outpatients receive Class B or Class C sedation, a second Phase II or step-down
recovery room shall be provided. The room shall contain handwashing stations, a nurse
station with charting facilities, clinical sink, provision for bedpan cleaning, and storage
space for supplies and equipment. In addition, the design shall provide a minimum of 50
square feet for each patient in a lounge chair with space for additional equipment
described in the functional program and for clearance of 4 feet between the sides of the
lounge chairs and the foot of the lounge chairs. Provisions shall be made for the isolation
of infectious patients. Provisions for patient privacy such as cubicle curtains shall be
made. In new construction, at least one door shall access the PACU without crossing
unrestricted corridors of the hospital. A patient toilet shall be provided with direct access
to the Phase II recovery unit for the exclusive use of patients. A staff toilet shall be
provided with direct access to the working area to maintain staff availability to patients.

Handwashing stations with hands-free operable controls shall be available with at least
one for every four lounge chairs uniformly distributed to provide equal access from each
patient bed.

18. Change areas for outpatients and same-day admissions. If the functional program defines
outpatient surgery as part of the surgical suite, a separate area shall be provided where
outpatients may change from street clothing into hospital gowns and be prepared for
surgery. This would include a waiting room, locker(s), toilet(s), and clothing change or
gowning area. Changing may also be accommodated in a private holding room or
cubicle.
19. Provisions shall be made for patient examination, interviews, preparation, testing, and obtaining vital signs of patients for outpatient surgery.

20. Patient holding area. In facilities with two or more operating rooms, an area shall be provided to accommodate stretcher patients waiting for surgery. This holding area shall be under the visual control of the nursing staff.

21. Storage areas for portable X-ray equipment, stretchers, fracture tables, warming devices, auxiliary lamps, etc. These areas shall be out of corridors and traffic.

22. Emergency equipment storage under direct control of the nursing staff and not obstructing the corridor.

23. Environmental Services closet. See Section 69, Physical Facilities, Cleaning and Sanitizing Carts and Environmental Services, for detailed requirements.

24. Area for preparation and examination of frozen sections. This may be part of the general laboratory if immediate results are obtainable without unnecessary delay in the completion of surgery.

25. Ice machine. An ice machine shall be provided to provide ice for treatments and patient use. Ice intended for human consumption shall be from self-dispensing ice makers.

26. A waiting room, with toilets, telephones, and drinking fountains conveniently located. The toilet room shall contain handwashing stations. If outpatients, as defined by the written functional program, are required to wait in this area, then a separate area shall be provided. Provisions shall be made for examinations, interviews, testing, and obtaining vital signs. A separate area shall be provided where outpatients may change from street clothing into hospital gowns.

27. Ethylene Oxide Sterilization Facilities. Where ethylene oxide is used for sterilization, provisions shall be made for complete exhaust of gases to the exterior. When the door is opened, arrangement shall ensure that gases are pulled away from the operator.

Provisions shall be made for appropriate aeration of supplies. Aeration cabinets shall be vented to the outside. Where aeration cabinets are not used in ethylene oxide processing, provision for isolated area mechanically vented to the outside for aeration, OSHA standards shall be met.

F. Preoperative Patient Holding Area(s). In facilities with two or more operating rooms, areas shall be provided to accommodate stretcher patients as well as sitting space for ambulatory patients not requiring stretchers. These areas shall be under the direct visual control of the nursing staff and may be part of the recovery suite to achieve maximum flexibility in managing surgical case loads. Each stretcher station shall be a minimum of 80 square feet and shall have a minimum clearance of 4 feet on the sides of the stretchers and the foot of the stretcher. Provisions shall be made for the isolation of infectious patients. Provisions for patient privacy such as cubicle curtains shall be made.
G. Post-anesthetic care units (PACUs).

1. Each PACU shall contain a medication station; handwashing stations; nurse station with charting facilities; clinical sink; provisions for bedpan cleaning; and storage space for stretchers, supplies, and equipment. Additionally, the design shall provide a minimum of 80 square feet for each patient bed with a space for additional equipment described in the functional program, and for clearance of at least 5 feet between patient beds and 4 feet between patient bedsides and adjacent walls. Provisions shall be made for the isolation of infectious patients. Provisions for patient privacy such as cubicle curtains shall be made. In new construction, at least one door to the recovery room shall access directly from the surgical suite without crossing public hospital corridors.

2. An airborne infection isolation room is not required in a PACU. Provision for the recovery of a potentially infectious patient with an airborne infection shall be determined by the Infection Prevention and Control Risk Assessment.

3. A staff toilet shall be located within the working area to maintain staff availability to patients.

4. Handwashing stations with hands-free operable controls shall be available with at least one for every four beds uniformly distributed to provide equal access from each patient bed.
SECTION 54: PHYSICAL FACILITIES, OBSTETRICAL FACILITIES.

General. The obstetrical unit shall be located and designated to prohibit non-related traffic through the unit. When delivery and operating rooms are in the same suite, access and service arrangements shall be such that neither staff nor patients need to travel through one area to reach the other. Except as permitted otherwise herein, existing facilities being renovated shall, as far as practicable, provide all the required support services.

A. Postpartum Unit.

1. Postpartum Room.

   a. A postpartum room shall have a minimum of 100 square feet of clear floor area per bed in multi-bedded rooms and 120 square feet of clear floor area in single-bedded rooms. These areas shall be exclusive of toilet rooms, closets, alcoves, or vestibules. Where renovation work is undertaken, every effort shall be made to meet the above minimum standards. If it is not possible to meet the above square –foot standards, the authorities having jurisdiction may grant approval to deviate from this requirement. In such cases, existing postpartum patient rooms shall have no less than 80 square feet of clear floor area per bed in multiple-bed rooms and 100 square feet in single-bed rooms.

   b. In multi-bedded rooms there shall be a minimum clear distance of four feet between the foot of the bed and the opposite wall, three feet between the side of the bed and nearest wall, and four feet between beds.

   c. The maximum number of beds per room shall be two.

2. Unless the functional program demonstrates the therapeutic and social value of a multibed arrangement, the maximum number of beds per room should be one.

   a. Each patient room shall have a window or windows.

   b. Handwashing stations shall be provided in each patient bedroom. In multi-bedded rooms the handwashing station shall be located outside the patients' cubical curtains so it is accessible to staff.

   c. Each patient shall have access to a toilet room or bathroom with handwashing stations without entering a general corridor. One such room shall serve no more than two beds and no more than two patient rooms.

3. The following support services for this unit shall be provided.

   a. Nurses' station.

   b. Nurse office.
c. Charting facilities.
d. Toilet room for staff.
e. Staff lounge.
f. Lockable closets or cabinets for personal articles of staff.
g. Consultation/conference room(s).
h. Patients’ lounge. The patients’ lounge may be omitted if all rooms are single-bedded rooms.
i. Clean workroom or clean supply room. A clean workroom is required if clean materials are assembled within the obstetrical suite prior to use. It shall contain a work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as part of a system for distribution of clean and sterile supply materials, the work counter and handwashing fixtures may be omitted. Soiled and clean workrooms or holding rooms shall be separated and have no direct connection.
j. Soiled workroom or soiled holding room for the exclusive use of the obstetrical suite. This room shall be separate from the clean workroom. The soiled workroom shall contain a clinical sink (or equivalent flushing-rim fixture) and a handwashing fixture. The above fixtures shall have a hot and cold mixing faucet. The room shall have work counter and space for separate covered containers for soiled linen and waste. Rooms used only for temporary holding of soiled material may omit the clinical sink and work counter. If the flushing-rim clinical sink is omitted, facilities for cleaning bedpans shall be provided elsewhere.
k. Medication station. Provision shall be made for storage and distribution of drugs and routine medications. This may be done from a medicine preparation room or unit, from a self-contained medicine dispensing unit, or by another approved system. If used, a medicine preparation room or unit shall be under visual control of nursing staff. It shall contain work counter, sink, refrigerator, and double-locked storage for controlled substances. Convenient access to handwashing stations shall be provided. (Standard cup-sinks provided in many self-contained units are not adequate for handwashing.)
l. Clean linen storage may be part of a clean workroom or a separate closet. When a closed cart system is used, the cart shall be stored out of the path of normal traffic.
m. Nourishment station shall contain sink, work counter, ice dispenser, refrigerator, cabinets, and equipment for serving hot or cold food. Space shall be included for temporary holding of unused or soiled dietary trays.
n. Equipment storage room. Each unit shall provide sufficient storage area(s) located on the patient floor to keep its required corridor width free of equipment and supplies, but not less than 10 square feet per postpartum
room and 20 square feet per each LDR or LDRP outside of the patient room.

o. Storage space for stretchers and wheelchairs shall be provided in a strategic location, out of corridors and away from normal traffic.

p. When bathing facilities are not provided in patient rooms, there shall be at least one shower and/or bathtub for each six beds or fraction thereof.

q. A housekeeping room shall be provided for the exclusive use of the obstetrical suite. It shall be directly accessible from the suite and shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment.

r. Examination/treatment room and/or multipurpose diagnostic testing room shall have a minimum clear floor area of 120 square feet. When utilized as a multi-patient diagnostic testing room, a minimum clear floor area of 80 square feet per patient shall be provided. An adjoining toilet room shall be provided for patient use.

s. Emergency equipment storage shall be located in close proximity to the nurses' station.

4. Airborne infection isolation room(s). An airborne infection isolation room is not required for the obstetrical unit. Provisions for the care of the perinatal patient with an airborne infection shall be determined by the Infection Prevention and Control Risk Assessment.

B. Cesarean/Delivery Suite.

1. Caesarean/delivery room(s) shall have a minimum clear floor area of 360 square feet with a minimum dimension of 16 feet exclusive of built-in shelves or cabinets. There shall be a minimum of one such room in every obstetrical unit.

2. Delivery room(s) shall have minimum clear area of 300 square feet exclusive of fixed cabinets and built-in shelves. An emergency communication system shall be connected with the obstetrical suite control station.

3. Infant resuscitation shall be provided within the cesarean/delivery room(s) and delivery rooms with a minimum clear floor area of 40 square feet in addition to the required area of each room or may be provided in a separate but immediately accessible room with a clear floor area of 150 square feet. Six single or three duplex electrical outlets shall be provided for the infant in addition to the facilities required for the mother.

4. Labor room(s) (LDR or LDRP rooms may be substituted). In renovation projects, existing labor rooms may have a minimum clear area of 100 square feet per bed.

Where LDRs or LDRPs are not provided, a minimum of two labor beds shall be provided for each Caesarean room and/or delivery room. In facilities that have only one Caesarean/delivery room, two labor rooms shall be provided. Each room shall be
designed for either one or two beds with a minimum clear area of 120 square feet per bed. Each labor room shall contain a handwashing fixture and have access to a private toilet room. One toilet room may serve two labor rooms. Labor rooms shall have controlled access with doors that are arranged for observation from a nurses' station. At least one shower (which may be separate from the labor room if under staff control) for use of patients in labor shall be provided. Windows in labor rooms, if provided, shall be located, draped, or otherwise arranged to preserve patient privacy from causal observation from outside the labor room.

5. Recovery room(s). (LDR or LDRP rooms may be substituted). Each recovery room shall contain at least two beds and have a nurses station with charting facilities located to permit visual control of all beds. Each room shall include stations for handwashing and dispensing medicine. A clinical sink with bedpan flushing device shall be available, as shall storage for supplies and equipment. There shall be enough space for baby and crib and a chair for the support person. There shall be the ability to maintain visual privacy of the new family.

6. Service Areas.

   a. Individual rooms shall be provided as indicated in the following standards; otherwise, alcoves or other open spaces that do not interfere with traffic may be used.

   b. The following services shall be provided:

      1) A control/nurse station located to restrict unauthorized traffic into the suite.

      2) Soiled workroom or soiled holding room. This room shall be separate from the clean workroom. The soiled workroom shall contain a clinical sink (or equivalent flushing-rim fixture). The room shall contain a handwashing fixture. The above fixtures shall have a hot and cold mixing faucet. The room shall have a work counter and space for separate covered containers for soiled linen and waste. Rooms used only for temporary holding of soiled material may omit the clinical sink and work counter. If the flushing-rim clinical sink is eliminated, facilities for cleaning bedpans shall be provided elsewhere.

      3) Fluid waste disposal.

   c. The following services may be shared with the surgical facilities if the functional program reflects this concern. Where shared, areas shall be arranged to avoid direct traffic between the delivery and operating rooms.

      1) A supervisor’s office or station.

      2) A waiting room, with toilets, telephones, and drinking fountains conveniently located. The toilet room shall contain handwashing stations.

      3) Sterilizing facilities with high-speed sterilizers convenient to all Caesarean/delivery rooms. Sterilization facilities shall be separate from
the delivery area and adjacent to clean assembly. High-speed autoclaves shall only be used in an emergency situation (i.e., a dropped instrument and no sterile replacement readily available). Sterilization facilities would not be necessary if the flow of materials were handled from a central service department based on the usage of the delivery room (DR).

4) A drug distribution station with handwashing stations and provisions for controlled storage, preparation, and distribution of medication.

5) Scrub facilities for Caesarean/delivery rooms. Two scrub stations shall be provided adjacent to entrance to each Caesarean/delivery room. Scrub facilities should be arranged to minimize any splatter on nearby personnel or supply carts. In new construction, provide view windows at scrub stations to permit the observation of room interiors.

6) Clean workroom or clean supply room. A clean workroom shall be provided if clean materials are assembled within the obstetrical suite prior to use. If a clean workroom is provided it shall contain a work counter, sink equipped for handwashing and space for storage of supplies. A clean supply room may be provided when the narrative program defines a system for the storage and distribution of clean and sterile supplies.

7) Medical gas storage facilities. Main storage of medical gases may be outside or inside the facility in accordance with NFPA99. Provision shall be made for additional separate storage of reserve gas cylinders necessary to complete at least one day’s procedures.

8) A clean sterile storage area readily available to the delivery room: size to be determined on level of usage, functions provided, and supplies from the hospital central distribution area.

9) An anesthesia workroom for cleaning, testing, and storing anesthesia equipment. It shall contain a work counter, sink, and provisions for separation of clean and soiled items.

10) Equipment storage room(s) for equipment and supplies used in the obstetrical suite.

11) Staff clothing change areas. The clothing change area shall be designed to encourage one-way traffic and cross-traffic between clean and contaminated personnel. The area shall contain lockers, showers, toilets, handwashing stations, and space for donning and disposing scrub suits and booties.

12) Male and female support persons change area (designed as described above).

13) Lounge and toilet facilities for obstetrical staff convenient to delivery, labor, and recovery areas. The toilet room shall contain handwashing stations.
14) An on-call room(s) for physician and/or staff may be located elsewhere in the facility.

15) Housekeeping room with a floor receptacle or service sink and storage space for housekeeping supplies and equipment.

16) An area for storing stretchers out of the path of normal traffic.

C. LDR and LDRP Facilities. When provided by the functional program, delivery procedures in accordance with birthing concepts may be performed in the LDR or LDRP rooms. LDR room(s) may be located in a separate LDR suite or as part of the Caesarean/Delivery suite. The postpartum unit may contain LDRP rooms. These rooms shall have a minimum of 250 square feet of clear floor area with a minimum dimension of 13 feet, exclusive of toilet room, closet, alcove, or vestibules. There should be enough space for crib and reclining chair for support person. An area within the room but distinct from the mother's area shall be provided for infant stabilization and resuscitation. See Table 4 of the Appendix for medical gas outlets. These outlets shall be located in the room so that they are accessible to the mother's delivery area and infant resuscitation area. When renovation work is undertaken, every effort shall be made to meet the above minimum standards. If it is not possible to meet the above square-foot standards, the authorities having jurisdiction may grant approval to deviate from this requirement. In such cases, existing LDR or LDRP rooms may have a minimum clear area of 200 square feet.

Each LDR or LDRP room shall be for single occupancy and have direct access to a private toilet with shower or tub. Each room shall be equipped with handwashing stations (handwashing stations with hands-free operation area acceptable for scrubbing). Examination lights may be portable, but shall be immediately accessible.

Finishes shall be selected to facilitate cleaning and with resistance to strong detergents. Window(s) shall be provided for LDRP room(s). Windows or doors within a normal sightline that would permit observation into the room shall be arranged or draped as necessary for patient privacy. Additional requirements for windows are provided above in A.2.a.
SECTION 55: PHYSICAL FACILITIES, EMERGENCY SUITE.

A. General. The following shall be provided:

1. Grade-level well-marked, illuminated, and covered entrance with direct access from public roads for ambulance and vehicle traffic. Entrance and driveway shall be clearly marked. If a raised platform is used for ambulance discharge, a ramp shall be provided for pedestrian and wheelchair access. The emergency vehicle entry cover shall provide shelter for both the patient and the emergency medical crew during transfer from an emergency vehicle into the building.

2. Paved emergency access to permit discharge of patients from automobiles and ambulances, and temporary parking convenient to the entrance.

3. Reception, triage, and nurses' station shall be located to permit staff observation and control of access to treatment area, pedestrian and ambulance entrances, and public waiting area. The triage area requires special consideration. As the point of entry and assessment for patients with undiagnosed and untreated airborne infections, the triage area shall be designed and ventilated to reduce exposure of staff, patients and families to airborne infectious diseases. If determined by the infection prevention and control risk assessment, one or more separate, enclosed spaces designed and ventilated as airborne infection isolation rooms shall be required.

4. Wheelchair and stretcher storage shall be provided for arriving patients. This shall be out of traffic with convenient access from emergency entrances.

5. Public waiting area with toilet facilities, drinking fountains, and telephones shall be provided. The hospital shall conduct infection prevention and control risk assessment to determine if the emergency department waiting area shall require special measures to reduce the risk of airborne infection transmission. These measures may include enhanced general ventilation and air disinfection similar to inpatient requirements for airborne infection isolation rooms.

6. Communication center shall be convenient to nurses' station and have radio, telephone, and intercommunication systems.

7. Examination and Treatment Room(s). Examination and treatment room(s) shall have minimum floor area of 120 square feet. The room shall contain work counter(s); cabinets; handwashing stations; supply storage facilities; examination lights; a desk, counter, or shelf space for writing; and a vision panel adjacent to and/or in the door. When treatment cubicles are in open multiple-bed areas, each cubicle shall have a minimum of 80 square feet of clear floor space and shall be separated from adjoining cubicles by curtains. Handwashing stations shall be provided for each four treatment cubicles or major fraction thereof in multiple-bed areas. For oxygen and vacuum requirements, see Table 4 of the Appendix. Treatment/exam rooms used for pelvic exams should allow for the foot of the examination table to face away from the door.
8. Trauma/cardiac rooms for emergency procedures, including emergency surgery, shall have at least 250 square feet of clear floor space. Each room shall have cabinets and emergency supply shelves, X-ray film illuminators, examination lights, and counter space for writing. Additional space with cubicle curtains for privacy may be provided to accommodate more than one patient at a time in the trauma room. Provisions shall be made for monitoring the patient. There shall be storage provided for immediate access to attire used for universal precautions. Doorways leading from the ambulance entrance to the cardiac trauma room shall be a minimum of five feet wide to simultaneously accommodate stretchers, equipment, and personnel. In renovation projects, every effort shall be made to have existing cardiac/trauma rooms meet the above minimum standards.

9. Orthopedic and cast work. These may be in separate room(s) or in the trauma room. They shall include storage for splints and other orthopedic supplies, traction hooks, X-ray film illuminators, and examination lights. If a sink is used for the disposal of plaster of paris, a plaster trap shall be provided. The clear floor space for this area shall depend on the functions program and the procedures and equipment accommodated here.

10. Scrub stations located in or adjacent and convenient to each trauma and/or orthopedic room.

11. Convenient access to radiology and laboratory services.

12. Poison Control Center and EMS Communications Center may be part of the work and charting area.

13. Provisions for disposal of solid and liquid waste. This may be a clinical sink with bedpan flushing device within the soiled workroom.

14. Storage area out of line of traffic for stretchers, wheelchairs and emergency equipment;

15. Housekeeping room with a floor receptacle or service sink and storage space for housekeeping supplies and equipment.

16. Soiled workroom for the exclusive use of the emergency suite. This room shall be separate from the clean workroom. The soiled workroom shall contain a clinical sink or equivalent flushing type fixture, work counter, sink equipped for handwashing, waste receptacle and linen receptacle. This room shall be separate from the clean workroom and shall have separate access doors.

17. Clean workroom or clean supply room. A clean work room is required if clean materials are assembled within the emergency suite prior to use. It shall contain a work counter, a handwashing fixture, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as part of a system for distribution of clean and sterile supply materials, the work counter and handwashing fixtures may be omitted. Soiled and clean workrooms or holding rooms shall be separated and have no direct connection.

18. Nurses' Station(s). Facilities for charting, clinical records, work counter, communication system, space for supplies and convenient access to handwashing stations shall be provided. Visual observation of all traffic into the suite, where feasible.

19. Securable closets or cabinet compartments for personnel.
20. Staff Lounge. Convenient and private access to staff toilets, lounge, and lockers shall be provided.

21. Housekeeping room. A housekeeping room shall be directly accessible from the unit and shall contain a service sink or floor receptor and provisions for storage of supplies and housekeeping equipment.

22. Security station. A security system should be located near the emergency entrances and triage/reception area. The non-selective 24-hour accessibility of the emergency dictates that a security system reflecting local community needs be provided.

23. At least one airborne infection isolation room shall be provided. The need for additional airborne infection isolation rooms or for protective environment room shall be as determined by the Infection Prevention and Control Risk Assessment. See Section 48.C for requirements.

24. Bereavement Room shall be located within or adjacent to the emergency suite. A telephone shall be provided.

25. Secured holding room in accordance with the functional program. At least one holding/seclusion room of 80 square feet shall be provided. This room shall allow for security, patient and staff safety, patient observations, and soundproofing.

26. Decontamination area. A decontamination area shall be provided. The functional program shall define the location of the area and the types of exposure (i.e., nuclear, biological, chemical) to be considered. The location of the area shall be permitted to be on the exterior perimeter of the facility adjacent to the ambulance entrance or built within the walls of the facility.
SECTION 56: PHYSICAL FACILITIES, IMAGING SUITE.

A. General.

1. Equipment and space shall be as required by the functional program.

2. A certified physicist or other qualified expert shall specify the type, location, and amount of radiation protection to be installed in accordance with the final approved department layout and equipment selections. Where protected alcoves with view windows are required, a minimum of one foot six inches between the view window and the outside partition edge shall be provided. Radiation protection requirements shall be incorporated into the specifications and the building plans.

3. Radiation Control and Emergency Management shall be notified when any existing and/or new equipment has been relocated or introduced into the facility. Radiation Control approval for the equipment(s) and space(s) shall be obtained prior to use.

B. Angiography.

1. Space shall be provided as required by the functional program.

2. A control room shall be provided as necessary to meet the needs of the functional program. A view window in the control room shall be provided to permit full view of the patient.

3. A viewing area shall be provided.

4. A scrub sink located outside the staff entry to the procedure room shall be provided for use by staff.

5. A patient holding area shall be provided.

6. Storage for portable equipment and supplies shall be provided.

7. Provision shall be made within the facility for extended post-procedure observation of outpatients.

C. Computerized Tomography (CT) Scanning.

1. A control room shall be provided which is designed to accommodate the computer and other controls for the equipment. A view window shall be provided to permit full view of the patient. The angle between the control and equipment centroid shall permit the control operator to see the patient's head.

2. The control room shall be located to allow convenient film processing.

3. A patient toilet room shall be convenient to the procedure room, and if directly accessible to the scan room, arranged so that a patient may leave the toilet without having to reenter the scan room.
D. Diagnostic X-ray (e.g., Tomography, Radiography/Fluoroscopy Rooms, Mammography). Radiology rooms shall be of a size to accommodate the functional program. Each X-ray room shall include a shielded control alcove. This area shall be provided with a view window designed to provide full view of the examination table and the patient at all times, including full view of the patient when the table is in the tilt position or the chest X-ray is being utilized. For mammography machines with built-in shielding for the operator, the alcove may be omitted when approved by the certified physicist or state radiation protection agency.

E. Magnetic Resonance Imaging (MRI).
   1. Space shall be provided as required by the functional program.
   2. A control room shall be provided with full view of the MRI.
   3. A computer room shall be provided.
   4. A patient holding area should be located near the MRI unit.
   5. Cryogen venting shall comply with manufacturer's recommendations.

F. Ultrasound.
   1. Space shall be provided as required by the functional program.
   2. A patient toilet room, accessible from the procedure room and from the corridor, shall be provided.

G. Support Spaces. The following spaces are common to the imaging department and are minimum requirements unless stated otherwise.
   1. Patient Waiting Area. The area shall have a seating capacity in accordance with the functional program.
   2. Control Desk and Reception Area.
   3. Holding Area. A convenient holding area under staff control shall be provided to accommodate patients on stretchers or beds.
   4. Patient Toilet Rooms. Toilet rooms shall be provided convenient to the waiting rooms and shall be equipped with an emergency call system. Separate toilets with handwashing stations shall be provided with direct access from each radiography/fluoroscopy room so that a patient may leave the toilet without having to reenter the radiography/fluoroscopy room. Rooms used only occasionally for fluoroscopy procedures may utilize nearby patient toilets if they are located for immediate access.
   5. Patient Dressing Rooms. Dressing rooms shall be provided convenient to the waiting areas and X-ray rooms. Each room shall include a seat or bench, mirror, and provisions for hanging patients' clothing.
6. Staff Facilities. Toilets may be outside the suite but shall be convenient for staff use. In larger suites of three or more procedure rooms, toilets internal to the suite shall be provided.

7. Image Storage. Provisions shall be provided by the facility for the active and inactive image storage. A room with cabinet or shelves for filing patient image for immediate retrieval shall be provided. A room or area for inactive image storage shall be provided. It may be outside the imaging suite, but shall be under imaging's administrative control and properly secured to protect films against loss or damage.

8. Storage for Unexposed Image. Storage facilities for unexposed images shall include protection of film against exposure or damage and shall not be warmer than the air of adjacent occupied spaces.

9. Provisions for image viewing, individual consultation, clerical spaces and charting shall be provided.

10. Contrast Media Preparation. This area shall be provided with sink, counter, and storage to allow for mixing of contrast media. One preparation area, if conveniently located, may serve any number of rooms. When prepared media is used, this area may be omitted, but storage shall be provided for the media.

11. Image Processing Room. A darkroom shall be provided for image processing unless the processing equipment normally used does not require a darkroom for loading and transfer. When daylight processing is used, the darkroom may be minimal for emergency and special uses. Image processing shall be located convenient to the procedure rooms and to the quality control area.

12. Quality Control Area. An area shall be provided near the processor for viewing film immediately after it is processed. All view boxes shall be illuminated to provide light of the same color value and intensity for appropriate comparison of several adjacent images.

13. Cleanup Facilities. Provisions for cleanup shall be located within the suite for convenient access and use and shall include service sink or floor receptacle as well as storage space for equipment and supplies. If automatic film processors are used, a receptacle of adequate size with hot and cold water for cleaning the processor racks shall be provided.

14. Handwashing Stations. Handwashing stations shall be provided within each procedure room unless the room is used only for routine screening such as chest X-rays where the patient is not physically handled by the staff. Handwashing stations shall be provided convenient to the MRI room, but need not be within the room.

15. Clean Storage. Provisions shall be made for the storage of clean supplies and linens. If conveniently located, storage may be shared with another department.


17. Provision shall be made for locked storage of medications and drugs.
H. Cardiac Catheterization Lab. Note: The number of procedure rooms and the size of the prep, holding, and recovery areas shall be based on expected utilization.

1. The cardiac catheterization lab is normally a separate suite, but may be within the imaging suite when the appropriate sterile environment is provided. It may be combined with angiography in low usage situations.

2. The procedure room shall be a minimum of 400 square feet exclusive of fixed and movable cabinets and shelves.

3. A control room or area for the efficient functioning of the X-ray and image recording equipment. A view window permitting full view of the patient from the control console shall be provided.

4. An equipment room or enclosure large enough to contain x-ray transformers, power modules, and associated electronics and electrical gear shall be provided.

5. Scrub facilities with hands free operable controls shall be provided adjacent to the entrance of procedure rooms, and shall be arranged to minimize incidental splatter on nearby personnel, medical equipment, or supplies.

6. The following shall be available for use by the cardiac catheterization suite:
   a. A viewing room;
   b. A film file room.

7. Staff change area(s) shall be provided and arranged to ensure a traffic pattern so that personnel entering from outside the suite can enter, change their clothing, and move directly into the cardiac catheterization suite.

8. A patient preparation, holding, and recovery area or room shall be provided and arranged to provide visual observation before and after the procedure.

9. A clean workroom or clean supply room shall be provided. If the room is used for preparing patient care items, it shall contain a work counter and handwashing sink. If the room is used only for storage and holding of clean and sterile supply materials, the work counter and handwashing stations may be omitted.

10. A soiled workroom shall be provided which shall contain a handwashing and a clinical sink (or equivalent flushing rim fixtures). When the room is used for temporary holding of soiled materials, the clinical sink may be omitted.

11. A housekeeping closet containing a floor receptor or service sink and provisions for storage of supplies and housekeeping equipment shall be provided.
SECTION 57: PHYSICAL FACILITIES, NUCLEAR MEDICINE.

A. Equipment and space shall be provided to accommodate the functional program.

B. A certified physicist or other qualified expert representing the owner shall specify the type, location, and amount of radiation protection to be installed in accordance with final approved department layout and equipment selection. These specifications shall be incorporated into the plans.

C. Floors and walls shall be constructed of materials that are easily decontaminated in case of radioactive spills.

D. If radiopharmaceutical preparation is performed onsite, an area adequate to house a radiopharmacy shall be provided with appropriate shielding. This area should include adequate space for storage of radionuclides, chemicals for preparation, dose calibrators, and record keeping. Floors and walls should be constructed of easily decontaminated materials. Vents and traps for radioactive gases should be provided if such are used. Hoods for pharmaceutical preparation shall meet applicable standards. If pre-prepared materials are used, storage and calculation area may be considerably smaller than that for on-site preparation. Space shall provide adequately for dose calibration, quality assurance, and record keeping. This area may still require shielding from other portions of the facilities.

E. Nuclear medicine area when operated separately from the imaging department shall include the following as required to accommodate the functional program:
   1. Space adequate to permit entry of stretchers, beds, and able to accommodate imaging equipment, electronic consoles, and if present, computer terminals;
   2. A darkroom onsite available for film processing. The darkroom should contain protective storage facilities for unexposed film that guard the film against exposure or damage;
   3. When the functional program requires a centralized computer area, it should be a separate room with access terminals available within the imaging rooms.
   4. Provisions for cleanup located within the suite for convenient access and use. It shall include service sink or floor receptacle as well as storage space for equipment and supplies;
   5. Film storage with cabinets or shelves for filing patient film for immediate retrieval;
   6. Inactive film storage under the departmental administrative control and properly secured to protect film against loss or damage;
   7. A consultation area with view boxes illuminated to provide light of the same color value and intensity for appropriate comparison of several adjacent films;
   8. Provisions for physicians, assistants and clerical office space, individual consultation, viewing, and charting of film;
9. Waiting areas out of traffic, under staff control, with seating capacity in accordance with the functional program. If the department is routinely used for outpatients and inpatients at the same time, separate waiting areas with screening or visual privacy between the waiting areas;

10. A private area for dose administration located near the preparation area;

11. A holding area for patients on stretchers or beds which may be provided and may be combined with the dose administration area with visual privacy between the areas;

12. Patient dressing rooms convenient to the waiting area and procedure rooms. Each dressing room shall include a seat or bench, a mirror, and provisions for hanging patient's clothing;

13. Toilet rooms convenient to waiting and procedure rooms;

14. Staff toilet(s) convenient to the nuclear medicine laboratory;

15. Handwashing stations within each procedure room;

16. Control desk and reception area;

17. Storage area for clean linen with a handwashing station;

18. Provisions shall be made for holding soiled material. Such provision shall include a handwashing station.

19. Separate provision shall be made for holding contaminated material (exposed to radiation).

F. Positron Emission Tomography (PET).

1. Space should be provided as necessary to accommodate the functional program.

2. PET scanning is generally used in experimental settings and requires space for a scanner and for a cyclotron. The scanner room should be a minimum of 300 square feet.

3. Where a cyclotron room is required, it should be a minimum of 225 square feet with a 16 square foot space safe for storage of parts, which may need to cool down for a year or more.

4. Both a hot (radioactive) lab and a cold (nonradioactive) lab may be required, each a minimum of 250 square feet.

5. A blood lab of a minimum of 80 square feet should be provided.

6. A patient holding area to accommodate two stretchers should be provided.
7. A gas storage area large enough to accommodate bottles of gas should be provided. Each gas will be piped individually and may go to the cyclotron or to the lab. Ventilation adequate for the occupancy is required. Compressed air may be required to pressurize a water circulation system.

8. Significant radiation protection may be required since the cyclotron may generate high radiation.

9. Special ventilation systems together with monitors, sensors, and alarm systems may be required to vent gases and chemicals.

10. The heating, ventilating, and air conditioning system will require particular attention; highest pressures should be in coldest (radiation) areas and exhaust should be in hottest (radiation) areas. Redundancy may be important.

11. The cyclotron is water cooled with de-ionized water. A heat exchanger and connection to a compressor or connection to chilled water may be required. A redundant plumbing system connected to a holding tank may be required to prevent accidental leakage of contaminated water into the regular plumbing system.

G. Radiotherapy.

1. Rooms and spaces shall be provided as required by the functional program. Equipment manufacturers recommendations should be sought and followed, since space requirements may vary from one machine to another and one manufacturer to another. The radiotherapy suite may contain one or both electron beam therapy and radiation therapy.

2. Cobalt, linear accelerators, and simulation rooms require radiation protection. A certified physicist representing the owner or appropriate state agency shall specify the type, location, and amount of protection to be installed in accordance with final approved department layout and equipment selection. The information shall be incorporated into the floor plans.

3. Cobalt rooms and linear accelerators shall be sized in accordance with equipment requirements and shall accommodate a stretcher for litter-borne patients. Layouts shall provide for preventing the escape of radioactive particles. Openings into the room, including doors, ductwork, vents, and electrical raceways and conduits, shall be baffled to prevent direct exposure to other areas of the facility.

4. Simulator, accelerator, and cobalt rooms shall be sized to accommodate the equipment with patient access on a stretcher, medical staff access to the equipment and patient, and service access.

5. Flooring shall be adequate to meet load requirements for equipment, patients, and personnel. Provision for wiring raceways, ducts, or conduit should be made in floors and ceilings. Ceiling mounted equipment should have properly designed rigid support structures located above the finished ceiling. The ceiling height is normally higher than 8'-0" (2.44 meters). A lay-in type of ceiling should be considered for ease of installation, service, and remodeling.
6. Additional Support Areas for Linear Accelerator:
   a. Mold room with exhaust hood and handwashing station.
   b. Block room with storage. The block room may be combined with the mold room.

7. Additional Support Areas for Cobalt Room:
   Hot lab.

H. General Support Areas. The following areas shall be provided unless they are accessible from other areas such as imaging:

1. A stretcher holding area adjacent to the treatment rooms, screened for privacy which may be combined with a seating area for outpatients;

2. Exam rooms as specified by the functional program. Each shall be a minimum of 120 square feet and equipped with a handwashing station;

3. Darkroom convenient to the treatment room(s) and the quality control area. Where daylight processing is used, the darkroom may be minimal for emergency use. If automatic film processors are used, a receptacle of adequate size with hot and cold water for cleaning the processor racks shall be provided either in the darkroom or nearby;

4. Patient gowning area with provision for safe storage of valuables and clothing. At least one space should be large enough for staff-assisted dressing;

5. Business office and/or reception/control area;

6. Housekeeping room equipped with service sink or floor receptor and large enough for equipment or supplies storage;

7. Image file area; and

8. A storage area for unprocessed media.

I. Optional Support Area. The following areas may be required by the functional program:

1. Quality control area with view boxes illuminated to provide light of the same color value and intensity;

2. Computer control area normally located just outside the entry to the treatment room(s);

3. Dosimetry equipment area;

4. Hypothermia room (may be combined with an exam room);

5. Consultation room;
6. Oncologist's office (may be combined with consultation room);
7. Physicist's office (may be combined with treatment planning);
8. Treatment planning and record room; and
SECTION 58: PHYSICAL FACILITIES, MOBILE, TRANSPORTABLE, AND RELOCATABLE UNITS.

A. General. This section applies to mobile, transportable, and relocatable structures.

B. Definitions.
   1. Mobile Unit - Any premanufactured structure, trailer, or self-propelled unit equipped with a chassis on wheels and intended to provide medical services on a temporary basis.
   2. Transportable Unit - Any premanufactured structure or trailer, equipped with a chassis on wheels, intended to provide medical services on an extended basis.
   3. Relocatable Unit - Any structure, not on wheels, built to be relocated at any time and provide medical services.

C. General Considerations.
   1. Classifications. These facilities shall be classified as either a small outpatient facility, large outpatient facility, ambulatory surgery center, or a hospital based upon the definitions provided in the Rules and Regulations, the program functional and construction type.
   2. Applicable Requirements. Facilities classified as a small outpatient clinic shall be designed in accordance with the requirements stipulated in Section 80, Physical Facilities, Outpatient Care Facilities. Facilities classified as a large outpatient facility shall be designed in accordance with the requirements stipulated in item F. of Section 80, Physical Facilities, Outpatient Care Facilities. Facilities classified as an ambulatory surgery center shall be designed in accordance with the requirements stipulated in Section 79, Physical Facilities, Free-standing Ambulatory Surgery Centers. Facilities classified as a hospital shall be designed in accordance with the requirements stipulated in Section 47, Physical Facilities.
   3. These requirements shall be applicable to mobile, transportable, and relocatable structures, when such structures are used to provide shared medical services on an extended or a temporary basis.
   4. When any mobile unit, transportable and relocatable unit(s) are situated in a fixed location and rendered immobile they shall be classified and designed as a health care facility.

D. Common Elements for Mobile, Transportable, and Relocatable Units.
   1. Site Conditions.
      a. Access for the unit to arrive shall be taken into consideration for space planning. Turning radius of the vehicles, slopes of the approach (six (6) percent maximum), and existing conditions shall be addressed.
b. Gauss fields of various strengths of magnetic resonance imaging (MRI) units shall be considered for the environmental effect on the field homogeneity and vice versa. Radio frequency interference shall be considered when planning the site.

c. Sites shall be provided with properly sized power, including emergency power, water, waste, telephone, and fire alarm connections.

d. Site shall have level concrete pads or piers and be designed for the structural loads of the facility.

e. Site utilizing MRI systems shall consider providing adequate access for cryogen-servicing of the magnet. Storage of dewars also shall be included in space planning.

f. It is recommended that each site provide a covered walkway or enclosure to ensure patient safety from the outside elements.

g. Diesel exhaust of the tractor and/or unit generator shall be 25 feet away from the fresh air intake of the facility.

h. Each facility shall provide a means of preventing unit movement, either by blocking the wheels or by providing pad anchors.

i. Sites shall provide hazard-free patient drop-off zones and adequate parking.

j. The facility shall provide waiting space for patient privacy and patient and staff toilets as close to the unit docking area as possible.

k. Each site shall provide access to the unit for wheelchair/stretcher patients.

l. Mobile units shall be provided with handwashing stations unless each site can provide handwashing stations within a 25 foot proximity to the unit. Transportable and relocatable units shall be provided with handwashing stations.

E. General Standards for Details and Finishes for Unit Construction.

1. Horizontal sliding doors and power-operated doors shall comply with NFPA 101.

2. Units shall be permitted a single means of egress as permitted by NFPA 101.

3. All glazing in doors shall be safety or wire glass.

4. Units shall be equipped with fire detection and alarm systems. In relocatable and transportable units these systems shall be connected to the central fire alarm system.

5. Radiation protection for X-ray and gamma ray installations shall be in accordance with Arkansas Rules and Regulations for Control of Sources of Ionizing Radiation.

6. Interior finish materials shall be class A as defined in NFPA 101.
7. Textile materials having a napped, tufted, looped, woven, nonwoven, or similar surface shall be permitted on walls and ceilings provided such materials have a class A rating and rooms or areas are protected by an automatic extinguishment or sprinkler system.

8. Fire retardant coatings shall be permitted in accordance with NFPA 101.

9. Curtains and draperies shall be noncombustible or flame retardant and shall pass both the large and small scale tests required by NFPA 101.

F. Mechanical Standards.

1. Air conditioning, heating, ventilating, ductwork, and related equipment shall be installed in accordance with NFPA 90A, Standard for the Installation of Air Conditioning and Ventilation systems.

2. Plumbing Standards.
   a. Plumbing and other piping systems shall be installed in accordance with the Arkansas State Plumbing Code.
   b. Mobile units, requiring sinks, shall not be required to be vented through the roof. Ventilation of waste lines shall be permitted to be vented through the sidewalls or other acceptable locations. Transportable and relocatable units shall be vented through the roof per model plumbing codes.
   c. Backflow prevention shall be installed at the point of water connection on the unit.
   d. Medical gases and suction systems, if installed, shall be in accordance with NFPA 99.

G. Electrical Standards

1. All electrical material and equipment, including conductors, controls, and signaling devices, shall be installed in compliance with applicable section of NFPA 70 and NFPA 99 and shall be listed as complying with available standards of listing agencies or other similar established standards where such standards are required.

2. The electrical installations, including alarm, nurse call, and communication systems, shall be tested to demonstrate that equipment installation and operation is appropriate and functional. A written record of performance tests on special electrical systems and equipment shall show compliance with applicable codes and standards.

3. Data processing and/or automated laboratory or diagnostic equipment, if provided, may require safeguards from power line disturbances.

4. Main switchboards shall be located in an area separate from plumbing and mechanical equipment and shall be accessible to authorized persons only. Switchboards shall be convenient for use, readily accessible for maintenance, away from traffic lanes, and located in dry, ventilated spaces free of corrosive or explosive fumes, gases, or any
flammable material. Overload protective devices shall operate properly in ambient room temperatures.

5. Panelboards serving normal lighting and appliance circuits shall be located on the same level as the circuits they serve.

6. Lighting shall be engineered to the specific application.

7. The Illuminating Engineering Society of North America (IES) has developed recommended lighting levels for health care facilities. The reader should refer to the IES Handbook (1993).

8. Approaches to buildings and parking lots and all occupied spaces shall have fixtures for lighting that can be illuminated as necessary.

9. Consideration should be given to the special needs the elderly. Excessive contrast in lighting levels that make effective sight adaptation difficult should be minimized.

10. A portable or fixed examination light shall be provided for examination, treatment, and trauma rooms.

11. Duplex grounded-type receptacles (convenience outlets) shall be installed in all areas in sufficient quantities for tasks to be performed as needed. Each examination and work table shall have access to a minimum of two duplex receptacles.

12. At inhalation anesthetizing locations, all electrical equipment and devices, receptacles, and wiring shall comply with applicable sections of NFPA 99 and NFPA 70.

13. Fixed and mobile x-ray equipment installations shall conform to articles 517 and 660 of NFPA 70.


15. The fire alarm system shall be as described in NFPA 101 AND WHERE APPLICABLE NFPA 72.

16. Terminating devices for telecommunications and information systems wiring shall be located on the unit that the terminating devices serve. These terminating devices shall be accessible to authorized personnel only.

17. Special air conditioning and voltage regulation shall be provided when recommended by the manufacturer.
SECTION 59: PHYSICAL FACILITIES, LABORATORY SERVICES.

A. Facilities necessary for providing laboratory services described in the functional program shall be provided. The laboratory shall be constructed, arranged and maintained to ensure adequate space, ventilation and utilities necessary for conducting all phases required of testing in accordance with current CLIA regulations refer to Section 19.

B. Specimen collection facilities shall be provided. These facilities may be located outside the laboratory suite. The blood collection area shall have a work counter, space for patient seating, and handwashing stations. Urine and feces collection room(s) shall be equipped with a water closet and a lavatory.

C. Provisions shall be made for safety from physical, chemical and biological hazards. There shall be eye flushing devices, appropriate storage of flammable liquids, emergency spill kit(s) and fire extinguishers as required by NFPA 99.

D. Based on the functional program, equipment for terminal sterilization of contaminated specimens (autoclave or microwave) shall be provided.

E. Locker and toilet facilities for laboratory staff shall be located convenient to the laboratory area.
SECTION 60: PHYSICAL FACILITIES, REHABILITATION THERAPY DEPARTMENT.

A. Common Elements. Each rehabilitative therapy department shall include the following, which may be shared or provided as separate units for each service:

1. Office and clerical space with provisions for filing and retrieval of patient records.
2. Reception and control station(s) with visual control of waiting and activities area. (This may be combined with office and clerical space.)
3. Patient waiting area(s) out of traffic with provision for wheelchair patients.
4. Patient toilets with handwashing stations accessible to wheelchair patients.
5. Space(s) for storing wheelchairs and stretchers out of traffic while patients are using the services. These spaces may be separate from the service area but shall be conveniently located.
6. A conveniently accessible housekeeping room and service sink for housekeeping use.
7. Locking closets or cabinets within the vicinity of each work area for securing staff personal effects.
8. Convenient access to toilets and lockers.
10. Lockable storage for medications.

B. Physical Therapy. If physical therapy is part of the service, the following at least, shall be included:

1. Individual treatment area(s) with privacy screens or curtains. Each such space shall have not less than 70 square feet of clear floor area.
2. Handwashing stations for staff either within or at each treatment space (one handwashing station may serve several stations).
3. Exercise area and facilities.
4. Clean linen and towel storage.
5. Storage for equipment and supplies.
6. Separate storage for soiled items.
7. Patient change area. (If required by the functional program.)

C. Occupational Therapy. If this service is provided, at least the following shall be included:
1. Work areas and counters suitable for wheelchair access.
2. Handwashing stations.
3. Storage for supplies and equipment.
4. An area for daily living activities shall be provided. It shall contain an area for a bed, kitchen counter with appliances and sink, bathroom, and a table/chair.

D. Prosthetics and Orthotics. If this service is provided, at least, the following shall be included:
   1. Work space for technicians;
   2. Space for evaluating and fitting, with provisions for privacy;
   3. Space for equipment, supplies and storage.

E. Recreation Therapy. NOTE: Recreation therapy assists patients in the development and maintenance of community living skills through the use of leisure-time activity tasks. These activities may occur in a recreation therapy department, in specialized facilities (e.g., gymnasium), multipurpose space in other areas (e.g., the nursing unit), or outdoors. If this service is provided, at least, the following shall be included:
   1. Activity areas suitable for wheelchair access;
   2. Handwashing stations if required by the program;
   3. Storage for supplies and equipment;
   4. Secured storage for supplies and equipment potentially harmful;
   5. Remote electrical switching for equipment potentially harmful.

F. Speech, Hearing, and Audio Therapy. If this service is provided, at least, the following shall be included:
   1. Space for evaluation and treatment of patients. The space shall be protected with acoustical treatment of walls and finishes.
   2. Space for equipment storage and supplies.

G. Respiratory Care. If respiratory care is part of the service, the following, at least, shall be included as a minimum:
   1. Storage of equipment and supplies.
      a. Space and utilities for cleaning and sanitizing equipment. Provide physical separation of the space for receiving and cleaning soiled materials from the space for storage of clean equipment and supplies. Appropriate local exhaust.
ventilation shall be provided if glutaraldehyde or other noxious disinfectants are used in the cleaning process.

b. If respiratory services, such as testing and demonstration for outpatients are part of the program, additional facilities and equipment shall be provided as necessary for the appropriate function of the service, including but not limited to:

1) Patient waiting area with provision for wheelchairs;
2) Reception and control station;
3) Patient toilets and handwashing stations;
4) Room(s) for patient education and demonstration;

2. Cough-Inducing and Aerosol-Generating Procedures. All cough-inducing procedures performed on patients who may have suspected or active infectious Mycobacterium tuberculosis shall be performed in rooms that meet the requirements for airborne infection control.
SECTION 61: PHYSICAL FACILITIES, MORGUE AND NECROPSY.

These facilities shall be directly accessible to an outside entrance and shall be located to avoid movement of bodies through public areas. The following elements shall be provided when autopsies are performed within the hospital:

A. Refrigerated facilities for body-holding;

B. Autopsy Room. This room shall contain:

1. Work counter with sink equipped for handwashing;
2. Storage space for supplies, equipment, and specimens;
3. Autopsy table;
4. A deep sink for washing of specimens;
5. A housekeeping service sink or receptor for cleanup and housekeeping.

NOTE: If autopsies are performed outside the facility, only a well ventilated, temperature-controlled, body-holding room need be provided.
SECTION 62: PHYSICAL FACILITIES, PHARMACY.

The size and type of services to be provided in the pharmacy can largely depend upon the type of medication distribution system used, number of patients to be served, and extent of shared or purchased services. This shall be described in the functional program. The pharmacy room or suite shall be located for convenient access, staff control, and security. Facilities and equipment shall be as necessary to accommodate the functions of the program. See Section 16, Pharmacy, for additional requirements. (Satellite facilities, if provided, shall include those items required by the program.) As a minimum, the following elements shall be included:

A. Dispensing.

1. A pickup and receiving area.
2. An area for reviewing and recording.
3. An extemporaneous compounding area that includes a sink and sufficient counter space for medication preparation.
4. Work counters and space for automated and manual dispensing activities.
5. An area for temporary storage, exchange, and restocking of carts.
6. Security provisions for medications and personnel in the dispensing counter area.

B. Manufacturing.

1. A bulk compounding area.
3. A quality control area.

C. Storage (may be cabinets, shelves, and/or separate rooms or closets).

1. Bulk storage.
2. Active storage.
3. Refrigerated storage.
4. Volatile fluids and alcohol storage constructed according to applicable fire safety codes for the substances involved.
5. Double-locked storage for controlled substances.
6. Storage for general supplies and equipment not in use.

D. Administration.
1. An area for education and training (may be in a multipurpose room shared with other departments).
2. An area for patient counseling and instruction (may be in a room separate from the pharmacy).
3. A separate area for office functions.

E. Other.

1. Handwashing stations shall be provided within each separate room where open medication is handled and readily accessible.
2. Provide for convenient access to toilet and locker.
3. If unit dose procedure is used, provide additional space and equipment for supplies, packaging, labeling, and storage, as well as for the carts.
4. If IV solutions are prepared in the pharmacy, provide a sterile work area with a laminar-flow work station designed for product protection. The laminar-flow system shall include a nonhydroscopic filter (HEPA) rated at 99.97 percent, as tested by DOP tests and have a visible pressure gauge for detection of filter leaks or defects.
5. Hoods used for chemotherapy shall be 100 percent exhausted to the exterior.
6. As a minimum the partitions enclosing the pharmacy shall extend from the floor to the deck above, with gypsum board on both sides of metal studs.
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SECTION 63: PHYSICAL FACILITIES, DIETARY FACILITIES.

Construction, equipment, and installation shall comply with the standards specified in FDA U.S. Public Health Service Food Code. Food service facilities shall be designed and equipped to meet the requirements of the functional program. These may consist of an onsite conventional food preparing system, a convenience food service system, or an appropriate combination of the two. The following shall be provided:

A. Receiving/Control Area. Provide an area for the receiving and control of incoming dietary supplies. This area shall be separated from the general receiving area and shall contain the following: a control station, and a breakout for loading, uncrating, and weighing supplies;

B. Storage Spaces. A minimum of four days’ supplies shall be stocked. (In remote areas, this number may be increased to accommodate length of delivery in emergencies). All food shall be stored clear of the floor. Lowest shelf shall not be less than 12 inches above the floor or shall be closed in and sealed tight for ease of cleaning.

C. Cleaning supplies storage. Provide a separate storage room for the storage of non-food items such as cleaning supplies that might contaminate edibles.

D. Food Preparation Facilities. Conventional food preparation systems shall have adequate space and equipment for preparing, cooking, and baking. Convenience food preparation systems shall have adequate space for equipment for thawing, portioning, cooking, and/or baking. These areas shall be as close as possible to the user (i.e., tray assembly and dining);

E. Assembly and Distribution Areas. A patient tray assembly area shall be located within close proximity to the food preparation and distribution areas;

F. Food Service Carts. A cart distribution area shall provide space for storage, loading, distribution, receiving, and sanitizing of food service carts. The cart traffic shall be designed to eliminate any danger of cross circulation between outgoing food carts and incoming, soiled carts, and the cleaning and sanitizing process. Cart circulation shall not traffic through food processing areas;

G. Handwashing Stations. These shall be operable without the use of hands and be readily accessible at locations throughout the dietary department;

H. Dining Area. There shall be dining space for ambulatory patients, staff, and visitors which is separate from the food preparation and distribution areas;

I. Area for Receiving, Scraping, and Sorting Soiled Tableware. Area shall be adjacent to ware washing and separate from food preparation areas. A handwashing fixture shall be conveniently available;

J. Dishwashing Space. An area shall be located in a room separate from food preparation and serving areas. Commercial-type dishwashing equipment shall be provided. Clean and soiled dish areas shall be separated with an opening in the partition between the clean and soiled dish area large enough for the dishwasher and ventilation of the area. The clean dish area may be either a separate room or a portion of the kitchen. A lavatory shall be conveniently available. The soiled dish area shall be so located as to prevent soiled dishes from being carried through the food preparation area;
K. **Ware Washing Facilities.** They shall be designed to prevent contamination of clean wares with soiled wares through cross-traffic. The clean wares should be transferred for storage or use in the dining area without having to pass through food preparation areas.

L. **Pot Washing Facilities.** Including multi-compartmented sinks of adequate size for intended use shall be provided convenient to using service. Supplemental heat for hot water to clean pots and pans may be by booster heater or by steam jet.

M. **Waste storage room.** A food waste storage room shall be conveniently located to the food preparation and ware washing areas but not within the food preparation area. It shall have direct access to the hospital's waste collection and disposal facilities.

N. **Storage Rooms and Areas.** A room for cans, carts, mobile tray conveyors, and cleaning and sanitizing carts shall be provided. There shall be a separate storage room for the storage of non-food items that might contaminate edibles (i.e., cleaning supplies). A separate space or room for the storage of cooking wares, extra trays, flatware, plastic and paper products, and portable equipment is required;

O. **Toilets and Locker Spaces.** Lockers, if provided in the dietary facility, shall be for the exclusive use of the dietary staff. Toilets and lockers shall not open directly into the food preparation areas, but shall be in close proximity to them;

P. **Office(s).** Dietary service manager/supervisor offices shall be conveniently located for visual control of receiving area and food preparation areas;

Q. **Janitor's Closet.** A closet shall be provided for the exclusive use of the dietary department to contain a floor sink and space for mops, pails, and supplies. Where hot water or steam is used for general cleaning, additional space within the room shall be provided for the storage of hoses and nozzles;

R. **Ice Making Equipment.** Equipment shall be convenient for service and easily cleaned. It shall be provided for both drinks (self-dispensing equipment), and for general use (storage bin type equipment);

S. **Commissary or Contract Services from Other Areas.** If a service is used, above items may be reduced as appropriate. The process of food delivery shall insure freshness, retention of hot and cold, and avoidance of contamination. If delivery is from outside sources, protection against weather shall be provided. Provisions shall be made for thorough cleaning and sanitizing of equipment to avoid mix of soiled and clean equipment;

T. **Equipment.** Mechanical devices shall be heavy duty, suitable for intended use and easily cleaned. Movable equipment shall have heavy duty locking casters. If equipment is to have fixed utility connections, it shall not be equipped with casters. Walk-in coolers, refrigerators, and freezers shall be insulated at floor, walls and top. Coolers and refrigerators shall be capable of maintaining a temperature down to freezing. Freezers shall be capable of maintaining a temperature of 20° below zero Fahrenheit. Coolers, refrigerators, and freezers shall be thermostatically controlled to maintain desired temperature settings in increments of two degrees or less. Interior temperatures shall be visible from the exterior. Controls may include audible and visible high and low temperature alarm. Time of alarm shall be automatically recorded. Walk-in units may be lockable from outside but shall have release mechanism for exit from inside at all times. Interior shall be
lighted. All shelving shall be corrosion resistant, easily cleaned, and constructed and anchored to support a loading of at least 100 pounds per linear foot. All cooking equipment shall be equipped with automatic shut off devices to prevent excessive heat buildup. Under counter conduits, piping, and drains shall be arranged to not interfere with cleaning of floor below or of the equipment;
SECTION 64: PHYSICAL FACILITIES, ADMINISTRATION AND PUBLIC AREAS.

The following areas shall be provided:

A. Facility entrance, at grade level, sheltered from the weather, and able to accommodate wheelchairs;

B. Lobby, which shall include:
   1. Reception and information counter or desk;
   2. Waiting space(s);
   3. Public toilet facilities (one for each sex);
   4. Public telephone(s); and
   5. Drinking fountain(s).

C. Interview space(s) for private interviews relating to social service, credit, and admissions;

D. General or individual office(s) for business transactions, medical and financial records, and administrative and professional staffs;

E. Multipurpose room(s) with provisions for the use of visual aids for conferences, meetings, and health education. One multipurpose room may be shared by several services;

F. Storage for office equipment and supplies; and

G. Staff toilet facilities.
SECTION 65: PHYSICAL FACILITIES, HEALTH INFORMATION UNIT.

The following rooms and areas shall be provided:

A. Health Information Director’s office or space;

B. Review and dictating room(s) or spaces;

C. Work area for sorting, recording, or microfilming records;

D. Medical record storage (Refer to Section 72.A.25); and

E. Rooms for patient medical records and archived patient medical records that remain onsite shall be kept in a one hour fire rated enclosure or protected by a sprinkler system; protected by a security system and a smoke detection system. Circulating records at the nurses’ station or in active working areas are excluded from this requirement. The records shall be protected against undue destruction from dust, vermin, water, etc.
SECTION 66: PHYSICAL FACILITIES, CENTRAL MEDICAL AND SURGICAL SUPPLY DEPARTMENT.

The following areas shall be provided:

A. Separate Soiled and Clean Work Areas

1. Soiled Workroom. This room shall be physically separated from all other areas of the department. Work space shall be provided to handle the cleaning and initial sterilization/disinfection of all medical/surgical instruments and equipment, work tables, sinks, flush-type devices, and washer/sterilizer decontaminators. Pass-through doors and washer/sterilizer decontaminators shall deliver into clean processing area/workrooms.

2. Clean Assembly/Workroom. This workroom shall contain handwashing stations, workspace, and equipment for terminal sterilizing of medical and surgical equipment and supplies. Clean and soiled work areas shall be physically separated.

B. Storage Areas

Clean/Sterile Medical/Surgical Supplies. A room shall be provided for the breakdown of clean/sterile bulk supplies. Storage for packs etc., shall include provisions for ventilation, humidity, and temperature control.

C. Administrative/Changing Room

If required by the functional program, this room shall be separate from all other areas and provide for staff to change from street clothes into work attire. Lockers, sink, and showers shall be made available within the immediate vicinity of the department.

D. Storage Room for Patient Care and Distribution Carts

This area shall be adjacent, easily available to clean and sterile storage, and close to main distribution point to keep traffic to a minimum and to ease work flow.
In addition to supply facilities in individual departments, a central storage area shall also be provided. General stores may be located in a separate building onsite with provisions for protection against inclement weather during transfer of supplies. The following shall be provided:

A. Off-street unloading facilities;

B. Receiving area;

C. General Storage Room(s). General storage rooms(s) with a total area of not less than 20 feet per inpatient bed shall be provided. Storage may be in separate, concentrated areas within the institution or in one or more individual buildings onsite. A portion of this storage may be provided offsite; and

D. Additional Storage Room(s). Additional storage areas for outpatient facilities shall be provided in an amount not less than five percent of the total area of the outpatient facilities. This may be combined with and in addition to the general stores or be located in a central area within the outpatient department. A portion of this storage may be provided offsite.
Each facility shall have provisions for storing and processing of clean and soiled linen for appropriate patient care. Processing may be done within the facility, in a separate building on- or off-site, or in a commercial or shared laundry.

A. Facility Processing. Facilities and equipment shall be as required for cost effective operation as described in the functional program. At a minimum, the following elements shall be included:

1. A separate room for receiving and holding soiled linen until ready for pickup or processing.

2. A central, clean linen storage and issuing room(s), in addition to the linen storage required at individual patient units.

3. Cart storage area(s) for separate parking of clean- and soiled-linen carts out of traffic.

4. A clean linen inspection and mending room or area. If not provided elsewhere, a clean linen inspection, delinting, folding, assembly and packaging area should be provided as part of the linen services. Mending should be provided for in the linen services department. A space for tables, shelving, and storage should be provided.

5. Handwashing stations in each area where unbagged, soiled linen is handled.

B. If linen is processed in a laundry facility that is not part of the licensed facility provisions shall also be made for:

1. A service entrance, protected from inclement weather, for loading and unloading of linen.

2. Control station for pickup and receiving.

3. The hospital is responsible to insure the commercial laundry does comply with Section 46, Physical Environment.

C. If linen is processed in a laundry facility that is part of the licensed facility, the following shall be provided in addition to that of Section 68 A:

1. A receiving, holding, and sorting room for control and distribution of soiled linen. Discharge from soiled linen chutes may be received within this room or in a separate room.

2. Laundry processing room with commercial type equipment that can process at least a seven-day supply within the regular scheduled workweek. This may require a capacity for processing a seven-day supply in a 40-hour week.

3. Storage for laundry supplies.
4. Employee handwashing stations in each room where clean or soiled linen is processed and handled.

5. Arrangement of equipment that will permit an orderly workflow and minimize cross traffic that might mix clean and soiled operations.

6. Conveniently accessible staff lockers, showers, and lounge.
SECTION 69: PHYSICAL FACILITIES, CLEANING AND SANITIZING CARTS, EMPLOYEE FACILITIES AND ENVIRONMENTAL CLOSETS.

A. Facilities shall be provided to clean and sanitize carts serving the central medical and surgical supply department, dietary facilities, and linen services. These may be centralized or departmentalized or offsite as required by the written functional program.

B. Lockers, lounges, toilets, etc. should be provided for employees and volunteers. These should be in addition to, and separate from, those required for medical staff and public.

C. Each environmental services closet shall contain a floor receptor and/or services sink and storage space for environmental services equipment (cart, bucket, etc.) and supplies. There shall be at least one environmental services closet for each floor.
SECTION 70: PHYSICAL FACILITIES, ENGINEERING SERVICE AND EQUIPMENT AREAS.

Space shall be included in all mechanical and electrical equipment rooms for proper maintenance of equipment. Provisions shall also be made to provide for equipment removal and replacement. The following shall be provided:

A. Boilers, mechanical equipment, and electrical equipment shall be located in ventilated rooms or buildings except as noted below:
   1. Rooftop air conditioning and ventilation equipment installed in weatherproof housings;
   2. Standby generators where the engine and appropriate accessories (i.e., batteries) are properly heated and enclosed in a weatherproof housing as recommended by the manufacturer;
   3. Cooling towers and other heat rejection equipment;
   4. Electrical transformers and switchgear where required to serve the facility and where installed in a weatherproof housing;
   5. Medical gas parks and equipment;
   6. Air cooled chillers where installed in a weatherproof housing;
   7. Waste processing equipment. Site lighting, post indicator valves, and other equipment normally installed on the exterior of the building;
   8. Site lighting, post indicator valves, and other equipment normally installed on the exterior of the building; and

B. Engineer's office with file space and provisions for secured storage of facility drawings, records, manuals, etc. The engineer’s office shall be a separate and distinct space dedicated for the purpose

C. General maintenance shop(s) for repair and maintenance as required by the functional program;

D. Storage room for building maintenance supplies. Storage for solvents and flammable liquids shall comply with applicable NFPA codes;

E. Yard equipment and supply storage shall be located so equipment may be moved directly to exterior without interfering with other work;

F. Separate area or room specifically for storage, repair, and testing of electronic and other medical equipment. The amount of space and type of utilities will vary with the type of equipment involved and types of outside contracts used.
SECTION 71: PHYSICAL FACILITIES, WASTE PROCESSING SERVICES.

A. Hazardous Waste and Antineoplastic Agent Disposal. The facility shall have policies and procedures for the identification, segregation, labeling, storage, transport and disposal of hazardous waste. The policies and procedures shall conform with the latest edition of Hazardous Waste Management Regulation 23, Arkansas Department of Environmental Quality, Little Rock, Arkansas. Within the facility, hazardous waste, especially antineoplastic agents, shall be labeled in a manner that it shall be easily recognized from all other waste. The facility shall compile a list of all antineoplastic agents used in the facility. The facility shall have policies and procedures for the clean up of spills, decontamination and treatment of personnel exposed to hazardous waste and antineoplastic agents.

B. Radioactive Waste Disposal. The facility shall have policies and procedures for the identification, segregation, labeling, storage, transport and disposal of radioactive waste and materials. The policies and procedures shall conform to the most current Rules and Regulations for Control of Sources of Ionizing Radiation, Arkansas Department of Health, Little Rock, Arkansas. The facility shall maintain records of all radioactive waste and materials which have been disposed.

C. Regulated Medical Waste (Infectious Waste) Disposal. The facility shall have policies and procedures for the identification, segregation, labeling, storage, transport and disposal of regulated medical waste. All policies and procedures shall conform to the latest edition of the Rules and Regulations Pertaining to the Management of Medical Waste from Generators and Health Care Related Facilities, Arkansas Department of Health, Little Rock, Arkansas. The facility shall have policies and procedures for the clean up of spills, and for decontamination and treatment of personnel exposed to regulated medical waste.

D. Solid Waste Disposal (Non-Infectious Waste). The facility shall have policies and procedures for the identification, segregation, labeling, storage, transport and disposal of solid waste. Policies and procedures shall conform with the latest edition of the Solid Waste Management Regulation 22, Arkansas Department of Environmental Quality, Little Rock, Arkansas.

E. Nuclear Waste Disposal: The facility shall have policies and procedures for the identification, segregation, labeling, storage, transport and disposal of nuclear waste. All policies and procedures shall conform to the Code of Federal Regulations; title X, parts 20 and 35, concerning the handling and disposal of nuclear materials in health care facilities.

F. Containers of hazardous and antineoplastic agent waste, radioactive waste, and regulated medical waste shall be closed except when receiving waste. Containers have swinging lids or lids that are easily contaminated are prohibited. Open containers shall be emptied between patients and the container disinfected. Containers shall be kept closed except when receiving waste.

G. Other Waste. The facility shall have policies and procedures for the identification, segregation, labeling, storage, transport, and disposal of any waste not specifically mentioned in this section.
SECTION 72: PHYSICAL FACILITIES, DETAILS AND FINISHES.

All details for alteration or expansion projects as well as for new construction shall comply with the following.

A. Details.

1. Compartmentation, exits, automatic extinguishing systems, and other details relating to fire prevention and fire protection shall comply with requirements listed in the NFPA referenced codes and be shown on the Fire Protection Plan. The Fire Safety Evaluation System (FSES) is an acceptable means of determining Life Safety Code compliance.

2. Minimum corridor width shall be eight feet clear without projections. Increased width shall be provided at elevator lobbies and other places where conditions may demand more clearance. All service or administrative corridors shall not be less than 44 inches in width. Doors to patient rooms shall be a minimum door size of three feet eight inches wide and seven feet high to provide clearance for movement of beds and other equipment. Alternatively NFPA 101 shall be deemed to meet requirements.

3. Items such as drinking fountains, telephone booths, and vending machines, shall be located so as not to project into exit access corridors. Incidental items shall be determined by the licensing agency.

4. Rooms containing bathtubs, sitz baths, showers, and water closets, subject to occupancy by patients, shall be equipped with doors and hardware which shall permit access from the outside in any emergency.

5. All doors between corridors, rooms, or spaces subject to occupancy, except elevator doors, shall be of the swing type. Openings to showers, baths, patient toilets, ICU patient compartments with the break away feature, and other such areas not leading to fire exits shall be exempt from this standard.

6. All patient room doors located on exit access corridors shall have positive latching hardware.

7. Doors to patients' toilet rooms and other rooms needing access for wheelchairs shall have a minimum width of 36 inches for new facilities. Alcoves and similar spaces which generally do not require doors are excluded from this requirement.

8. Windows shall be designed so that persons cannot accidentally fall out of them when they are open or shall be provided with security screens. Operation of windows shall be restricted to inhibit possible escape or suicide. Where the operation of windows or vents require the use of tools or keys, tools or keys shall be on the same floor and easily accessible to staff.

9. Glass doors, lights, sidelights, borrowed lights, and windows located within 12 inches of a door jamb (with a bottom frame height of less than 60 inches above the finished floor) shall be constructed of safety glass, wired glass, or plastic, break resistant material that creates no dangerous cutting edges when broken. Similar materials shall be used for wall openings in active areas such as recreation rooms and exercise rooms, unless otherwise
required for fire safety. Safety glass-tempered or plastic glazing materials shall be used for shower doors and bath enclosures. Plastic and similar materials used for glazing shall comply with the flame-spread ratings of NFPA 101. Safety glass or plastic glazing materials, as noted above, shall also be used for interior windows and doors, including those in pediatric and psychiatric unit corridors. In renovation projects, only glazing within 18 inches of the floor shall be changed to safety glass, wire glass, or plastic, break-resistant material. NFPA 101 contains additional requirements for glazing in exit corridors, etc., especially in buildings without sprinkler systems.

10. Where labeled fire doors are required, these shall be certified by an independent test laboratory as meeting the construction requirements equal to those for fire in NFPA Standard 80. Reference to a labeled door shall be construed to include labeled frame and hardware.

11. Trash chutes shall be in accordance with NFPA standard 82. In addition, linen and refuse chutes shall meet or exceed the following requirements:
   a. Service openings to chutes shall not be located in corridors or passageways but shall be located in a room which complies with NFPA 101;
   b. Service openings to chutes shall have approved self-closing Class B one and one-half hour labeled fire doors;
   c. Minimum cross-sectional dimensions of gravity chutes shall not be less than two feet;
   d. Chutes shall discharge directly into collection rooms separate from incinerator, laundry, or other services. Separate collection rooms shall be provided for trash and for linen. Chute discharge into collection rooms shall comply with NFPA 101;
   e. Gravity chutes shall extend through the roof with provisions for continuous ventilation as well as for fire and smoke ventilation. Openings for fire and smoke ventilation shall have an effective area of not less than that of the chute cross-section and shall be not less than four feet above the roof and not less than six feet clear of other vertical surfaces. Fire and smoke ventilating openings may be covered with single strength sheet glass.

12. Dumbwaiters, conveyors, and material handling systems shall comply with NFPA 101.

13. Thresholds and expansion joint covers shall be installed flush with the floor surface to facilitate use of wheelchairs and carts. Expansion and seismic joints shall be constructed to restrict the passage of smoke.

14. Grab bars shall be provided in all patients' toilets, showers, tubs, and sitz baths. The bars shall have one and one-half inch clearance to walls and shall have sufficient strength and anchorage to sustain a concentrated load of 250 pounds.

15. Soap dishes, soap dispensers and/or other devices shall be provided at showers, bath tubs, and all handwashing stations except scrub sinks.
16. Location and arrangement of handwashing stations shall permit proper use and operation. All sinks, except public toilets, janitor closets, and sinks used by patients only, shall have foot, knee, or wrist blade faucets. Particular care shall be given to the clearances required for blade-type operating handles.

17. Mirrors shall not be installed at handwashing fixtures in food preparation areas, nurseries, clean and sterile supply areas, scrub sinks, or other areas where asepsis is essential. Provisions for hand drying shall be included at all handwashing stations except scrub sinks. Paper units shall be enclosed to protect against dust or soil and to insure single unit dispensing.

18. Lavatories and handwashing stations shall be securely anchored to withstand an applied downward vertical load of not less than 250 pounds on the front of the fixture.

19. Radiation protection requirements of X-ray and gamma ray installations shall conform with Rules and Regulations for Control of Sources of Ionizing Radiation, Arkansas Department of Health.

20. The minimum ceiling height shall be seven feet ten inches with the following exceptions:
   a. Boiler rooms shall have ceiling clearances not less than two feet six inches above the main boiler header and connecting piping.
   b. Ceilings in radiographic, operating and delivery rooms, and other rooms containing ceiling-mounted equipment or ceiling-mounted surgical light fixtures shall be of sufficient height to accommodate the equipment or fixtures and their normal movement.
   c. Ceilings in corridors, storage rooms, and toilet rooms shall be not less than seven feet eight inches in height. Ceiling heights in small, normally unoccupied spaces may be reduced.
   d. Suspended tracks, rails, and pipes located in the traffic path for patients in beds and/or on stretchers, including those in inpatient service areas, shall be not less than seven feet above the floor. Clearances in other areas may be six feet eight inches.
   e. Where existing structures make the above ceiling clearance impractical, clearances shall be as required to avoid injury to individuals up to six feet four inches tall.
   f. Seclusion treatment rooms shall have a minimum ceiling height of nine feet.

21. Recreation rooms, exercise rooms, and similar spaces where impact noises may be generated shall not be located directly over patient bed area, delivery or operating suites, unless special provisions are made to minimize such noise.

22. Rooms containing heat-producing equipment (such as boiler or heater rooms and laundries) shall be insulated and ventilated to prevent any floor or partition surface from exceeding a temperature of ten degrees Fahrenheit above ambient room temperature.
23. Noise reduction criteria shown in Table 2 of the Appendix shall apply to partition, floor,
and ceiling construction in patient areas. (Careful attention shall be given to penetrations.)

24. Approved fire extinguishers shall be provided in locations throughout the building in accordance with NFPA Standard No. 10. Extinguishers located in exit corridors shall be recessed.

25. Offsite buildings or freestanding buildings used for storage of archived patient medical records shall be built of noncombustible materials and provide security and smoke detection systems for the records. Records shall be arranged in an accessible manner and stored at least six inches above the floor. Records shall be protected against undue destruction from dust, vermin, water, etc. X-ray film storage are not required to meet the above requirements.

26. Light fixtures shall be provided with protective covers in food preparation, serving areas, and patient care and treatment spaces. Protective light fixture covers are not required in corridors.

27. Minimum distance between patient room windows and adjacent structures shall be 30 feet (new construction only).

28. A panic bar releasing device shall be provided for all required exit doors subject to patient traffic (new construction only).

29. Doors in smoke barrier partitions shall comply with NFPA 101.

30. Fire rated roof-ceiling assemblies shall be listed with a nationally recognized laboratory.

31. Mechanical smoke door coordinators shall not be used. Adjustable hydraulic closures or the full length header type shall be used.

32. Corridor partitions, smokestop partitions, horizontal exit partitions, exit enclosures, and fire rated walls required to have protected openings shall be effectively and permanently identified with signs or stenciling in a manner acceptable to the Health Facility Services. Such identification shall be above any decorative ceiling and in concealed spaces.

B. Finishes.

1. Cubicle curtains and draperies shall be noncombustible or rendered flame retardant and shall pass both the large and small scale tests of NFPA Standard 701 and the requirements of NFPA 13 when applicable.

2. Flame spread, fuel contributed, smoke density, and critical radiant flux of finishes shall comply with NFPA 101.

3. Floors in areas and rooms in which anesthetic agents are stored or administered to patients shall comply with NFPA Standard 99. Conductive flooring may be omitted in anesthetizing areas where a written resolution is signed by the hospital board stating that no flammable anesthetic agents shall be used and appropriate notices are permanently and conspicuously affixed to the wall in each such area and room.
4. Floor materials shall be easily cleanable and have wear resistance appropriate for the location involved. Floors in areas used for food preparation or food assembly shall be water resistant and grease-proof. Joints in tile and similar material in such areas shall be resistant to food acids. In all areas frequently subject to wet cleaning methods, floor-materials shall not be physically affected by germicidal and cleaning solutions. Floors that are subject to traffic while wet (such as shower and bath areas, kitchens, and similar work areas) shall have a non-slip surface. Any facility designed to install carpet shall have prior approval from the Arkansas Department of Health. The prior approval in part shall be contingent upon submission of a laboratory test report from an approved independent laboratory indicating that the proposed carpet meets or exceeds the requirements listed in NFPA 101 and agreement by the Department as to the specific areas in which carpet is to be used. In all carpet installations no rubber backings or rubber padding shall be permitted except in cases where the carpet and backing are tested as an integral component and the integral component meets the requirements listed in NFPA 101. Carpet shall not be allowed in the following areas or rooms: operating rooms, delivery rooms, emergency rooms, intensive care units, nursery, recovery, kitchens, laboratories, LDR and LDRP rooms, clean and soiled holding/workrooms, and isolation rooms. Operating rooms shall have a seamless floor.

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

6. Wall finishes shall be washable. In the vicinity of plumbing fixtures, shall be smooth and water resistant.

7. Floors and walls penetrated by pipes, ducts, and conduits shall be tightly sealed to minimize entry of rodents and insects.

8. Ceilings in food-preparation and storage areas shall be cleanable with routine housekeeping equipment.

9. Operating rooms, trauma rooms, delivery rooms for Caesarean sections, and protective isolation rooms shall have ceilings with a smooth finish plaster or gypsum board surface with a minimum of fissures equipped with access panels where needed.

10. In psychiatric patient rooms, toilets, and seclusion rooms, ceiling construction shall be smooth finish plaster or gypsum board surface with a minimum of fissures. Ceiling-mounted air and lighting devices shall be security type. Ceiling-mounted sprinkler heads shall be of the concealed type.

11. Ceilings shall be cleanable and in the following areas shall be washable, waterproof, smooth finish plaster or gypsum board or vinyl faced acoustic panels: cardiac cath labs, surgical suite corridors, delivery suite corridors, central sterilization suite, autopsy rooms, bacteriology, mycology, media preparation rooms, glass washing rooms located in the labs, soiled holding rooms, soiled and clean utility rooms, emergency suite-treatment rooms and trauma rooms.

12. Finished ceilings may be omitted in mechanical, electrical, equipment spaces and shops.
13. Finished ceilings shall be provided for corridors in patient areas.

14. Sound sensitive areas such as neonatal intensive care may have special floor and ceiling treatments.
RULES FOR HOSPITALS AND RELATED INSTITUTIONS IN ARKANSAS 2020
06/13/19

SECTION 73: PHYSICAL FACILITIES, CONSTRUCTION, INCLUDING FIRE RESISTIVE REQUIREMENTS.

A. Design. Every building and every portion thereof shall be designed and constructed to sustain all dead and live loads in accordance with American Society of Civil Engineers, (ASCE), "Minimum Design Loads for Buildings and Other Structures."

B. Foundations. Foundations shall rest on natural solid bearing if a satisfactory bearing is available at reasonable depths. Proper soil-bearing values shall be established in accordance with recognized standards. If solid bearing is not encountered at practical depths, the structure shall be supported on drive piles or drilled piers designed to support the intended load without detrimental settlement, except that one story buildings may rest on a fill designed by a soils engineer. When engineered fill is used, site preparation and placement of fill shall be performed under the direct full-time supervision of the soils engineer. The soils engineer shall issue a final report on the compacted fill operation and certification of compliance with the job specifications. All footings shall extend to a depth not less than one foot below the estimated maximum frost line.

C. Construction.


NOTE: NFPA 101 generally covers fire/safety requirements only, whereas most model codes also apply to structural elements. The fire/safety items of NFPA 101 would take precedence over other codes in case of conflict. In the event NFPA 101 does not specifically address a life safety requirement found only in the Arkansas Fire Prevention Code, compliance with the requirement is not mandatory. Appropriate application of each would minimize problems. For example, some model codes require closers on all patient doors. NFPA 101 recognizes the potential fire/safety problems of this requirement and stipulates that if closers are used for patient room doors, smoke detectors shall also be provided within each affected patient room.

2. For renovation projects, the extent of new construction shall be determined by the licensing agency. Construction shall comply with applicable requirements of NFPA 101.

D. Free-standing Buildings (For Patient Use). Buildings of this element category are considered to be greater than 30 feet from the hospital or separated from the hospital by two hour fire resistance rated construction. Buildings housing non-sleeping patient areas shall comply with NFPA 101.

E. Free-standing Buildings. Separate free-standing buildings over 30 feet from an inpatient facility housing the boiler plant, laundry, shops, or general storage shall be built in accordance with applicable building codes for such occupancy.

F. Interior Finishes. Interior finish materials shall comply with the limitations as indicated in NFPA 101. If a separate underlayment is used with any floor finish materials, the underlayment and the finish material shall be tested as a unit. Tests shall be performed by an approved independent testing laboratory.
G. Insulation Materials. Building insulation materials, unless sealed on all sides and edges, shall have a flame spread rating of 25 or less and a smoke developed rating of 150 or less when tested in accordance with NFPA 255.

H. Flood Protection. Executive Order No 11296 was issued to minimize financial loss from flood damage to facilities constructed with federal assistance. In accordance with that order, possible flood effects shall be considered when selecting and developing the site. Insofar as possible, new facilities shall not be located on designated flood plains. Where this is unavoidable, consult with the Corps of Engineers regional office for the latest applicable regulations pertaining to flood insurance and protection measures that may be required.

I. Elevators. All hospitals having patient facilities (such as bedrooms, dining rooms, or recreation areas) or critical services (such as operating, delivery, diagnostic, or therapeutic) located on other than the grade-level entrance floor shall have electric or hydraulic elevators. Installation and testing of elevators shall comply with ANSI/ASME A17.1 for new construction and ANSI/ASME A17.3 for existing facilities. (See ASCE 7-93 for seismic design and control systems requirements for elevators.)

1. In the absence of an engineered traffic study the following guidelines for number of elevators shall apply:
   a. At least one hospital-type elevator shall be installed when one to 59 patient beds are located on any floor other than the main entrance floor.
   b. At least two hospital-type elevators shall be installed when 60 to 200 patient beds are located on floors other than the main entrance floor, or where the major inpatient services are located on a floor other than those containing patient beds. (Elevator service may be reduced for those floors providing only partial inpatient services.)
   c. At least three hospital-type elevators shall be installed where 201 to 350 patient beds are located on floors other than the main entrance floor, or where the major inpatient services are located on a floor other than those containing patient beds. (Elevator service may be reduced for those floors which provide only partial inpatient services.)
   d. For hospitals with more than 350 beds, the number of elevators shall be determined from a study of the hospital plan and the expected vertical transportation requirements.

2. Hospital-type elevator cars shall have inside dimensions that accommodate a patient bed with attendants. Cars shall be at least five feet eight inches wide by nine feet deep. Car doors shall have a clear opening of not less than four feet wide and seven feet high. In renovations, existing elevators that can accommodate patient beds used in the facility will not be required to be increased in size.

   NOTE: Additional elevators installed for visitors and material handling may be smaller than noted above, within restrictions set by standards for disabled access.

3. Elevators shall be equipped with a two way automatic level-maintaining device with an accuracy of ± one-fourth inch.
4. Each elevator, except those for material handling, shall be equipped with an independent keyed switch for staff use for bypassing all landing button calls and responding to car button calls only.

5. Elevator call buttons and controls shall not be activated by heat or smoke. Light beams, if used for operating door reopening devices without touch, shall be used in combination with door-edge safety devices and shall be interconnected with a system of smoke detectors. This is so the light control feature will be overridden or disengaged should it encounter smoke at any landing.

6. Field inspections and tests shall be made and the owner shall be furnished with written certification stating the installation meets the requirements set forth in this section as well as all applicable safety regulations and codes.
SECTION 74: PHYSICAL FACILITIES, MECHANICAL REQUIREMENTS.

A. General.

1. Prior to acceptance of the facility, all mechanical systems shall be tested and operated to demonstrate to the owner or his designated representative that the installation and performance of these systems conform to design intent. Test results shall be documented for maintenance files.

2. Upon completion of the special systems equipment installation contract, the owner shall be furnished with a complete set of manufacturers; operating, maintenance, and preventive instructions, parts list, and complete procurement information including equipment numbers and descriptions. Operating staff shall be provided with instructions for proper operation of systems and equipment.

3. Rotating mechanical equipment shall be mounted on vibration isolators as required to prevent unacceptable structure-borne vibration.

4. Supply and return mains and risers for cooling, heating, and steam systems shall be equipped with valves to isolate the various sections of each system and each piece of equipment.

B. Thermal and Acoustical Insulation.

1. Insulation within the building shall be provided to conserve energy, protect personnel, prevent vapor condensation, and reduce noise.

2. Insulation on cold surfaces shall include an exterior vapor barrier. Material that will not absorb or transmit moisture will not require a separate vapor barrier.

3. Insulation, including finishes and adhesives on the exterior surfaces of ducts, piping, and equipment, shall have a flame-spread rating of 25 or less and a smoke-developed rating of 50 or less as determined by an independent testing laboratory in accordance with NFPA 255.

4. Interior duct linings shall not be used. This requirement shall not apply to air terminals and sound attenuation devices that have special coverings over such linings.

5. Existing accessible insulation within areas that are renovated shall be inspected and addressed as appropriate.

C. Steam and Hot Water Systems and Pressure Vessels.

1. All pressure vessels shall meet the requirements of the Arkansas Boiler Inspector, Arkansas Department of Labor.

2. Boilers shall have the capacity, based upon the net ratings published by the Hydronics Institute or another acceptable national standard, to supply the normal heating, hot water and steam requirements of all systems and equipment. Their number and arrangement
shall accommodate facility needs despite the break down or routine maintenance for any one boiler. The capacity of the remaining boiler(s) shall be sufficient to provide hot water service for clinical, dietary, and patient use; steam for sterilization and dietary purposes; and heating for operating, delivery, birthing, labor, recovery, intensive care, nursery, and general patient rooms. Boilers shall be designed for a standby fuel and onsite standby fuel shall be provided with a minimum 48 hour capacity.

3. Boiler Accessories. Boiler feed pumps, heating circulating pumps, condensate return pumps, and fuel oil pumps shall be connected and installed to provide normal and standby service.

D. Air Conditioning, Heating and Ventilating Systems.

1. The systems shall be designed to provide the dry bulb temperatures noted in Table 3 of the appendix. The systems shall be designed and operated to provide the relative humidity noted in Table 3 of the appendix.

2. All rooms and areas in the facility used for patient care shall have provisions for ventilation. The ventilation rates shown in Table 4 shall be used only as minimum standards; they do not preclude the use of higher, more appropriate rates. Fans serving exhaust systems shall be located at the discharge end and shall be readily serviceable. Air supply and exhaust in rooms for which no minimum total air change rate is noted may vary down to zero in response to room load. For rooms listed in Table 4 where VAV systems are used, minimum total air change shall be within limits noted. Temperature control shall also comply with these standards. To maintain asepsis control, airflow supply and exhaust should generally be controlled to ensure movement of air from “clean” to “less clean” areas, especially in critical areas. The ventilation systems shall be designed and balanced according to the requirements shown in Table 4 and in the applicable notes.

3. Exhaust systems may be combined to enhance the efficiency of recovery devices required for energy conservation. Local exhaust systems shall be used whenever possible in place of dilution ventilation to reduce exposure to hazardous gases, vapors, fumes, or mists. Airborne infection isolation rooms shall not be served by exhaust systems incorporating energy recovery devices that permit cross-contamination.

4. Fresh air intakes shall be located at least 25 feet from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, plumbing vents, or areas that may collect vehicular exhaust or other noxious fumes. (Prevailing winds and/or proximity to other structures may require greater clearances.) Plumbing and vacuum vents that terminate at a level above the top of the air intake may be located as close as 10 feet. The bottom of outdoor air intakes serving central systems shall be as high as practical, but at least six feet above ground level, or, if installed above the roof, three feet above roof level. Exhaust outlets from areas that may be contaminated shall be above roof level and arranged to minimize recirculation of exhaust air into the building.

5. In new construction and major renovation work, air supply for operating and delivery rooms (excluding LDR/LDRP rooms) shall be from ceiling outlets near the center of the work area. Return air shall be near the floor level. Each operating and delivery room shall have at least two return-air inlets located as remotely from each other as practical.
(Design should consider turbulence and other factors of air movement to minimize fall of
particulates onto sterile surfaces.) Where extraordinary procedures, such as organ transplants, justify special designs, installation shall properly meet performance needs as determined by applicable standards. These special designs should be reviewed on a case-by-case basis. Temperature shall be individually controlled for each operating and cesarean section room.

6. The operating and delivery room (excluding LDR/LDRP rooms) room ventilation systems should operate at all times to maintain the “air movement relationship to adjacent areas.” The cleanliness of the spaces is compromised when the ventilation system is shut down, e.g., airflow from a less clean space such as the corridor can occur, and standing water can accumulate in the ventilation system (near humidifiers or cooling coils).

7. In new construction and major renovation work, air supply for rooms used for invasive procedures such as autopsy rooms, cardiac cath labs, cystoscopic rooms, trauma rooms, endoscopy rooms, bronchoscopy rooms, and/or rooms where anesthesia gases are used shall be from ceiling outlets near the center of the room and/or work area. Return or exhaust air inlets shall be near the floor level. Exhaust inlets for anesthesia evacuation and other special applications shall be permitted to be installed in the ceiling.

8. Each space routinely used for administering inhalation anesthesia and inhalation analgesia shall be served by a scavenging system to vent waste gases. If a vacuum system is used, the gas-collecting system shall be arranged so that it does not disturb patient respiratory systems. Gases from the scavenging system shall be exhausted directly to the outside. The anesthesia evacuation system may be combined with the room exhaust system, provided the part used for anesthesia gas scavenging exhausts directly to the outside and is not part of the recirculation system. Scavenging systems are not required for areas where gases are used only occasionally, such as the emergency room, offices for routine dental work, etc.

9. The bottoms of ventilation openings shall be at least three inches above the floor.

10. The space above ceilings in new construction shall not be used as plenum space to supply to, return air from, or to exhaust air from any patient room, operating room, critical care room, delivery room, endoscopy room, cardiac cath lab, bronchoscopy room, autopsy room, exam room, treatment room, airborne infection isolation room, protective environment room, radiology suite, laboratory suite, soiled workroom, soiled holding, physical therapy and hydrotherapy, ETO-sterilizer room, sterilizer equipment room, and central medical and surgical supply areas or rooms. Plenum return air space conforming to NFPA 90A requirements shall be acceptable in areas where it is not listed above.

11. All central ventilation or air conditioning systems shall be equipped with filters with efficiencies equal to, or greater than, those specified in Table 1 of the Appendix. Where two filter beds are required, filter bed number one shall be located upstream of the air conditioning equipment and filter bed number two shall be downstream of any fan or blowers. Filter efficiencies, tested in accordance with ASHRAE 52-92, shall be average. Filter frames shall be durable and proportioned to provide an airtight fit with the enclosing ductwork. All joints between filter segments and enclosing ductwork shall have gaskets or seals to provide a positive seal against air leakage. A manometer or equal
12. If duct humidifiers are located upstream of the final filters, they shall be located in a manner to prevent condensation on the surface of the filters. Ductwork with duct-mounted humidifiers shall have a means of water removal. An adjustable high-limit humidistat shall be located downstream of the humidifier to reduce the potential of condensation inside the duct. All duct take-offs should be sufficiently downstream of the humidifier to ensure complete moisture absorption. Steam humidifiers shall be used. Reservoir-type water spray or evaporative pan humidifiers shall not be used.

13. Air-handling duct systems shall be designed with accessibility for duct cleaning, and shall meet the requirements of NFPA 90A.

14. Ducts that penetrate construction intended to protect against X-ray, magnetic, RFI, or other radiation shall not impair the effectiveness of the protection.

15. Fire and smoke dampers shall be constructed, located, and installed in accordance with the requirements of NFPA 101, 90A, and the specific damper's listing requirements. Fans, dampers, and detectors shall be interconnected so that damper activation will not damage ducts. Maintenance access shall be provided at all dampers. All damper locations shall be indicated on design drawings. Dampers should be activated by fire or smoke sensors, not by fan cutoff alone. Switching systems for restarting fans may be installed for fire department use in venting smoke after a fire has been controlled. However, provisions should be made to avoid possible damage to the system due to closed dampers. When smoke partitions are required, heating, ventilation, and air conditioning zones shall be coordinated with compartmentation insofar as practical to minimize need to penetrate fire and smoke partitions.

16. Hoods and safety cabinets may be used for normal exhaust of a space provided that minimum air change rates are maintained. If air change standards in Table 4 of the Appendix do not provide sufficient air for proper operation of exhaust hoods and safety cabinets (when in use), supplementary makeup air (filtered and preheated) shall be provided around these units to maintain the required airflow direction and exhaust velocity. Use of makeup air will avoid dependence upon infiltration from outdoor and/or from contaminated areas. Makeup systems for hoods shall be arranged to minimize "short circuiting" of air and to avoid reduction in air velocity at the point of contaminant capture.

17. Laboratory hoods shall meet the following general standards:
   a. Have an average face velocity of at least 75 feet per minute.
   b. Have an exhaust fan located at the discharge end of the system.
   c. Have an exhaust duct system of noncombustible corrosion-resistant material as needed to meet the planned usage of the hood.

18. Laboratory exhaust and ventilation systems shall comply with NFPA 45.
19. Laboratory hoods shall meet the following special standards:

a. Fume hoods, and their associated equipment in the air stream, intended for use with perchloric acid and other strong oxidants, shall be constructed of stainless steel or other material consistent with special exposures, and be provided with a water wash and drain system to permit periodic flushing of duct and hood. Electrical equipment intended for installation within such ducts shall be designed and constructed to resist penetration by water. Lubricants and seals shall not contain organic materials. When perchloric acid or other strong oxidants are only transferred from one container to another, standard laboratory fume hoods and the associated equipment may be used in lieu of stainless steel construction.

b. In new construction and major renovation work, each hood used to process infectious or radioactive materials shall have a minimum face velocity of 90 feet per minute with suitable pressure-independent air modulating devices and alarms to alert staff of fan shutdown or loss of airflow. Each shall also have filters with 99.97 percent efficiency (based on dioctyl-phthalate (DOP) test method) in the exhaust stream, and be designed and equipped to permit the safe removal, disposal, and replacement of contaminated filters. Filters shall be as close to the hood as practical to minimize duct contamination. Fume hoods intended for use with radioactive isotopes shall be constructed of stainless steel or other material suitable for the particular exposure and shall comply with NFPA 801, Facilities for Handling Radioactive Materials. Radioactive isotopes used for injections, etc. without probability of airborne particulates or gases may be processed in a clean-workbench-type hood where acceptable to the Nuclear Regulatory Commission.

20. Exhaust hoods handling grease-laden vapors in food preparation enters shall comply with NFPA 96. All hoods over cooking ranges shall be equipped with grease filters, fire extinguishing systems, and heat-actuated fan controls. Cleanout openings shall be provided every 20 feet and at changes in direction in the horizontal exhaust duct systems serving these hoods. (Horizontal runs of ducts serving range hoods should be kept to a minimum.

21. The ventilation system for anesthesia storage rooms shall conform to the requirements of NFPA 99.

22. The ventilation system for the space that houses ethylene oxide (ETO) sterilizers should be designed to:

a. Provide a dedicated (not connected to a return air or other exhaust system) exhaust system. Refer to 29 CFR Part 1910.1047.

b. All source areas shall be exhausted, including the sterilizer equipment room, service/aeration areas, over the sterilizer door, and the aerator. If the ETO cylinders are not located in a well-ventilated, unoccupied equipment space, an exhaust hood shall be provided over the cylinders. The relief valve shall be terminated in a well-ventilated, unoccupied equipment space, or outside the building. If the floor drain which the sterilizer(s) discharges to is not located in a well-ventilated, unoccupied equipment space, an exhaust drain cap shall be provided (coordinate with local codes).
c. Ensure that general airflow is away from sterilizer operator(s).

d. Provide a dedicated exhaust duct system for ETO. The exhaust outlet to the atmosphere should be at least 25 feet away from any air intake.

23. An audible and visual alarm shall activate in the sterilizer work area, and a 24 hour staffed location, upon loss of airflow in the exhaust system.

24. Rooms with fuel-fired equipment shall be provided with sufficient outdoor air to maintain equipment combustion rates.

25. Gravity exhaust may be used, where conditions permit, for nonpatient areas such as boiler rooms, central storage, etc.

26. The energy-saving potential of variable air volume systems is recognized and these standard herein are intended to maximize appropriate use of that system. Any system utilized for occupied areas shall include provisions to avoid air stagnation in interior spaces where thermostat demands are met by temperatures of surrounding areas.

27. Special consideration shall be given to the type of heating and cooling units, ventilation outlets, and appurtenances installed in patient-occupied areas of psychiatric units. The following shall apply:

a. All air grilles and diffusers shall be of a type that prohibits the insertion of foreign objects. All exposed fasteners shall be tamper-resistant.

b. All convector or HVAC enclosures exposed in the room shall be constructed with round corners and shall have enclosures fastened with tamper-resistant screws.

c. HVAC equipment shall be of a type that minimizes the need for maintenance with the room.

28. Rooms or booths used for sputum induction, aerosolized pentamidine treatments, and other high-risk cough-inducing procedures shall be provided with local exhaust ventilation. See Table 4 of the Appendix for ventilation requirements.

29. Non-central air handling systems, i.e., individual room units that are used for heating and cooling purposes (fan-coil units, heat pump units, etc.) in areas permitted by Table 4 to utilize air recirculated by means of a room unit shall be equipped with permanent (cleanable) or replaceable filters. The filters shall have a minimum efficiency of 68 percent weight arrestance. These units may be used as recirculating units only. All outdoor air requirements shall be met by a separate central air handling system with the proper filtration, as noted in Table 1 of the Appendix.

30. For special needs pharmacy work area and equipment requirements refer to Laws and Regulations - Arkansas State Board of Pharmacy.
SECTION 75: PHYSICAL FACILITIES, PLUMBING AND OTHER PIPING SYSTEMS.

All plumbing systems shall be designed and installed in accordance with the requirements of the latest edition of the Arkansas State Plumbing Code and the latest edition of the Laws, Rules, and Regulations Governing Boiler Inspection, Arkansas Department of Labor.

A. Plumbing Fixtures.

1. The material used for plumbing fixtures shall be nonabsorbent acid-resistant material.

2. The water supply spout for lavatories and sinks required in patient care areas (except patient rooms) shall be mounted so that the discharge point is a minimum distance of five inches above the rim of the fixture.

3. 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 not exceed four and one-half inches in length, except that handles on clinical sinks shall be not less than six inches long. (Automatic controls are acceptable.) Scrub sinks shall be trimmed with foot, knee or ultrasonic controls.

4. Clinical sinks shall have an integral trap in which the upper portion of the water trap provides a visible seal.

5. Shower bases and tubs shall provide non-slip walking surfaces.

B. Potable Water Supply Systems.

1. Systems shall be designed to supply water at sufficient pressure 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. Appropriate panels for access shall be provided at all valves where required.

3. Backflow preventers (vacuum breakers) shall be installed on hose bibs, laboratory sinks, janitors' sinks, bedpan flushing attachments, autopsy tables, and on all other fixtures to which hoses or tubing can be attached.

4. Bedpan flushing devices shall be provided in each inpatient toilet room. Installation is optional in psychiatric and alcohol-abuse units where patients are ambulatory.

5. The following standards shall apply to hot water systems:

   a. The water-heating system shall have sufficient supply capacity at the temperatures and amounts indicated in Table 9 of the Appendix. Water temperature is measured at the point of use or inlet to the equipment.
b. Hot-water distribution systems serving patient care areas shall be under constant recirculation to provide continuous hot water at each hot water outlet. The temperature of hot water for showers and bathing shall be appropriate for safe and comfortable use. (See table 9 of the Appendix)

6. Water distribution systems shall be arranged to provide hot water at each hot water outlet at all times. (See table 9 of the Appendix)

C. Drainage Systems. The following standards shall apply to drainage systems:

1. Drain lines used for acid waste disposal shall be made of acid-resistant material.

2. Drain lines serving some types of automatic blood-cell counters shall be of carefully selected material that will eliminate potential for undesirable chemical reactions (and/or explosions) between sodium oxide wastes and copper, lead, brass, and solder, etc.

3. Drainage piping should not be installed within the ceiling or exposed in operating and delivery rooms, nurseries, food preparation centers, food serving facilities, food storage areas, central services, electronic data processing areas, electric closets, and other sensitive areas. Where exposed overhead drain piping in these areas is unavoidable, special provisions shall be made to protect the space below from leakage, condensation, or dust particles.

4. Floor drains shall not be installed in operating and delivery rooms.

5. If a floor drain is installed in cystoscopy, it shall contain a nonsplash, horizontal-flow flushing bowl beneath the drain plate. Note: Floor drains in cystoscopy operating rooms have been shown to disseminate heavily contaminated spray during flushing. Unless regularly flushed with large amounts of fluid, the trap tends to dry out and permit passage of gases, vapors, odors, insects and vermin directly into the operating room. For new construction, if a floor drain is insisted upon by the users, the drain plate should be located away from the operative preferably with a closed system of drainage. Alternative methods include (a) an aspirator/trap installed in a wall connected to the collecting trough of the operating table by a closed, disposable tube system, or (b) a closed system using portable collecting vessels. (See NFPA 99.)

6. Drain systems for autopsy tables shall be designed to positively avoid splatter or overflow onto floors or back siphonage and for easy cleaning and trap flushing.

7. Building sewers shall discharge into community sewage. Where such a system is not available, the facility shall treat sewage in accordance with local and state regulations.

8. Kitchen grease traps shall be located and arranged to permit easy access without the need to enter food preparation or storage areas. Grease traps shall be of capacity required and shall be accessible from outside of the building without need to interrupt any services.

9. Where plaster traps are used, provisions shall be made for appropriate access and cleaning.

10. In dietary areas, floor drains and/or floor sinks shall be of a type that can be easily cleaned by removal of cover. Provide floor drains or floor sinks at all "wet equipment"
(i.e., ice machines) and as required for wet cleaning of floors. Provide removable stainless steel mesh in addition to grilled drain cover to prevent entry of large particles of waste which might cause stoppages. Location of floor drains and floor sinks shall be coordinated to avoid conditions where locations of equipment make removal of covers for cleaning difficult.

D. The installation, testing, and certification of nonflammable medical gas and air systems shall comply with the requirements of NFPA 99. (See Table 11 of the Appendix for rooms that require station outlets.)

E. Clinical vacuum system installations shall be in accordance with NFPA 99. (See Table 11 of the Appendix for rooms that require station outlets.)

F. All piping, except control-line tubing, shall be identified. All valves shall be tagged, and a valve schedule shall be provided to the facility owner for permanent record and reference.

G. When the functional program includes hemodialysis, continuously circulated filtered cold water shall be provided.

H. Provide condensate drains for cooling coils of a type that may be cleaned as needed without disassembly. Provide air gap where condensate drains empty into floor drains. Provide heater elements for condensate lines in freezer or other areas where freezing may be a problem.

I. No plumbing lines may be exposed overhead or on walls where possible accumulation of dust or soil may create a cleaning problem or where leaks would create a potential for food contamination.
SECTION 76: PHYSICAL ENVIRONMENT, ELECTRICAL STANDARDS.

A. General.

1. All electrical material and equipment, including conductors, controls, and signaling devices, shall be installed in compliance with and maintained per applicable sections of NFPA 70 and NFPA 99 and shall be listed as complying with available standards of listing agencies, or other similar established standards where such standards are required. Maintenance and testing of receptacles in patient care areas shall be performed at initial installation, replacement or servicing of devices. Records shall be maintained of all tests, rooms or areas tested, with itemized pass/fail indicators.

2. The electrical installations, including alarm, nurse call, and communication systems, shall be tested to demonstrate that equipment installation and operation is appropriate and functional. A written record of performance tests on special electrical systems and equipment shall demonstrate compliance with applicable codes and standards.

3. Shielded isolation transformers, voltage regulators, filters, surge suppressors, and other safeguards shall be provided as required where power line disturbances are likely to affect data processing and/or automated laboratory or diagnostic equipment.

B. Main switchboards shall be located in an area separate from plumbing and mechanical equipment and shall be accessible to authorized persons only. Switchboards shall be convenient for use, readily accessible for maintenance, away from traffic lanes, and located in dry, ventilated spaces free of corrosive or explosive fumes, gases, or any flammable material. Overload protective devices shall operate properly in ambient room temperatures.

C. Lighting.

1. The Illuminating Engineering Society of North America (IES) has developed recommended lighting levels for health care facilities. The reader should refer to the IES Handbook.

2. Approaches to buildings and parking lots, and all occupied spaces within buildings shall have fixtures that can be illuminated as necessary.

3. Patient rooms shall have general lighting and night lighting. A reading light shall be provided for each patient. Reading light controls shall be readily accessible to the patient(s). Incandescent and halogen light sources which produce heat shall be avoided to prevent burns to the patient and/or bed linen. The light source should be covered by a diffuser or lens. Flexible light arms, if used, shall be mechanically controlled to prevent the lamp from contacting the bed linen. At least one night light fixture in each patient room shall be controlled at the room entrance. Lighting for coronary and intensive care bed areas shall permit staff observation of the patient while minimizing glare.

4. Operating and delivery rooms shall have general lighting in addition to special lighting units provided at surgical and obstetrical tables. General lighting and special lighting shall be on separate circuits.
5. Nursing unit corridors shall have general illumination with provisions for reducing light levels at night.

6. Light intensity for staff and patient needs should generally comply with health care guidelines set forth in the IES publication. Consideration should be given to controlling intensity and/or wavelength to prevent harm to the patient’s eyes (i.e., retina damage to premature infants and cataracts due to ultraviolet light). Many procedures are available to satisfy lighting requirements, but the design should consider light quality as well as quantity for effectiveness and efficiency.

7. An examination light shall be provided for examination, treatment, and trauma rooms.


D. Receptacles.

1. Each operating and delivery room shall have at least six receptacles convenient to the head of the procedure table. Each operating room shall have at least 16 simplex or eight duplex receptacles. Where mobile X-ray, laser, or other equipment requiring special electrical configurations is used, additional receptacles distinctively marked for X-ray or laser use shall be provided.

2. Each patient room shall have duplex-grounded receptacles. There shall be one at each side of the head of each bed; one for television, if used; and one on every other wall. Receptacles may be omitted from exterior walls where construction or room configuration makes installation impractical. Nurseries shall have at least two duplex-grounded receptacles for each bassinet. Outlets for general care areas and critical care areas shall be provided for as defined by NFPA 99 and NFPA 70.

3. Duplex-grounded receptacles for general use shall be installed approximately 50 feet apart in all corridors and within 25 feet of corridor ends. Receptacles in pediatric and psychiatric unit corridors shall be of the tamper resistant type. Special receptacles marked for X-ray use shall be installed in corridors of patient areas so that mobile equipment may be used anywhere within a patient room using a cord length of 50 feet or less. If the same mobile X-ray unit is used in operating rooms and in nursing areas, receptacles for X-ray use shall permit the use of one plug in all locations. Where capacitive discharge or battery-powered X-ray units are used, special X-ray receptacles are not required.

4. Electrical receptacle cover plates or electrical receptacles supplied from the emergency systems shall be distinctively colored or marked for identification. If color is used for identification purposes, the same color shall be used throughout the facility.

5. For renal dialysis units, two duplex receptacles shall be on each side of a patient bed or lounge chair. One duplex receptacle on each side of the bed shall be connected to emergency power.

E. Equipment.
1. At inhalation anesthetizing locations, all electrical equipment and devices, receptacles, and wiring shall comply with applicable sections of NFPA 99 and NFPA 70.

2. Fixed and mobile X-ray equipment installations shall conform to articles 517 and 660 of NFPA 70.

3. The X-ray film illuminator unit or units for displaying at least two films simultaneously shall be installed in each operating room, specified emergency treatment rooms, and X-ray viewing room of the radiology department. All illuminator units within one space or room shall have lighting of uniform intensity and color value.

4. Ground-fault circuit interrupters (GFCI) shall comply with NFPA 70. When ground-fault circuit interrupters are used in critical areas, provisions shall be made to ensure the other essential equipment is not affected by activation of one interrupter.

5. In areas such as critical care units and special nurseries where a patient may be treated with an internal probe or catheter connected to the heart, the ground system shall comply with applicable sections of NFPA 99 and NFPA 70.

F. Nurse/Patient Communication Station.

1. In patient areas, each patient room shall be served by at least one nurse/patient communication station for two way voice communication. All primary nurse call systems shall be of the electrical/electronic nature. The signal shall activate an annunciator panel at the nurse station, a visible signal in the corridor at the patient's door, and at other areas defined by the functional program. Each bed shall be provided with a call device. Two call devices serving adjacent beds may be served on one calling station. Calls shall activate a visible signal in the corridor at the patient's door, in the clean workroom, in the soiled workroom, medication, charting, nourishment, and examination/treatment room(s) and at the nurses' station. In multi-corridor nursing units, additional visible signals shall be installed at corridor intersections. In rooms containing two or more nurse/patient communication stations, indicating lights shall be provided at each station. Nurse/patient communication stations at each calling station shall be equipped with an indicating light which remains lighted as long as the voice circuit is operating.

2. An emergency call system shall be provided at each inpatient toilet, bath and shower room. An emergency call shall be accessible to a collapsed patient on the floor. Inclusion of a pull cord within four to six inches from the floor will satisfy this standard. The emergency call shall be designed so that a signal activated at a patient's calling station will initiate a visible and audible signal distinct from the regular nurse/patient communication station that can be turned off only at the patient calling station.

The signal shall activate an annunciator panel at the nurse station, a visible signal in the corridor at the patient's door, and at other areas defined by the functional program. Provisions for emergency calls will also be provided in outpatient and treatment areas where patients are subject to incapacitation.

3. In areas such as critical care, recovery and pre-op, where patients are under constant visual surveillance, the nurse/patient communication call may be limited to a bedside button or station that activates a signal readily seen at the control station.
4. A staff emergency assistance system for staff to summon additional assistance shall be provided in each operating, delivery, recovery, emergency examination and/or treatment area, and in critical care units, nurseries, special procedure rooms, cardiac catheterization rooms, stress-test areas, triage, outpatient surgery admission and discharge areas, and areas for psychiatric patients including seclusion and security rooms, anterooms and toilet rooms serving them, communal toilet and bathing facility rooms, and dining, activity, therapy, exam and treatment rooms. This system shall annunciate audibly or visually in the clean work room, in the soiled work room, medication, charting, nourishment, and examination/treatment room(s) if provided and at the administrative center of the nursing unit with back up to another staffed area from which assistance can be summoned.

5. A nurse/patient communication station is not required in psychiatric nursing units, but if it is included, provisions shall be made for easy removal, or for covering call button outlets. In psychiatric nursing units all hardware shall have tamper-resistant fasteners.

G. Emergency power shall be provided in accordance with NFPA 99, NFPA 101, and NFPA 110.

H. Emergency electrical generators shall have a minimum 48 hours of on-site fuel.

I. All health care occupancies shall be provided with a fire alarm system in accordance with NFPA 101 and NFPA 72.

J. Telecommunications and Information Systems.

1. Locations for terminating telecommunications and information system devices shall be provided.

2. A room shall be provided for telecommunications and information systems. Special air conditioning and voltage regulations shall be provided when recommended by the manufacturer.

3. All patient care-related telecommunications and information systems shall be powered from the essential electrical system.

K. Annuciator alarm panels for Emergency Systems including but not limited to such as the fire alarms, medical gas and emergency generators shall be located according to the functional program and shall be located in prominent locations easily observed and accessible by staff at all times.
SECTION 77: HYPERBARIC SUITE

A. General

1. The number of treatment stations should be based upon the expected workload and may include several work shifts per day.

2. The location should offer convenient access for outpatients. Accessibility to the unit from parking and public transportation should be a consideration.

B. Treatment Areas

1. Hyperbaric chambers for multiple occupancy (Class A) should be installed in accordance with NFPA 99.

2. Hyperbaric chambers for individual patients (Class B) should be installed in accordance with NFPA 99 in a room or suite adequately sized to provide the following clearances: chamber and side wall, 5 feet; between chambers, 6 feet; and between the chamber headboard and the wall, 3 feet. A minimum passage space of 4 feet shall be provided at the foot of each chamber in addition to the required clearances for sliding patients' platforms in end-loading chambers.

C. Functional Elements. The following support spaces should be provided and may be shared with adjacent departments.

1. Patient waiting area. The area should be out of traffic, under staff control, and should have seating capacity in accordance with the functional program. When the hyperbaric suite is routinely used for outpatients and inpatients at the same time, separate waiting areas should be provided with screening for visual privacy between the waiting areas.

2. A control desk and reception area should be provided.

3. A holding area under staff control should accommodate inpatients on stretchers or beds. Stretcher patients should be out of the direct line of normal traffic. The patient holding area may be omitted for two or fewer individual hyperbaric chamber units.

4. Toilet rooms for the use of patients should be provided with direct access from the hyperbaric suite.

5. Dressing rooms for outpatients should be provided and should include a seat or bench, mirror, and provisions for hanging patients' clothing and for securing valuables. At least one dressing room should be provided to accommodate wheelchair patients.
6. An appropriate room for individual and family consultation with referring physicians should be provided for outpatients.

7. A clean storage space should be provided for clean supplies and linens. Handwashing stations should be provided with hands-free operable controls. When a separate storage room is provided, it may be shared with another department when conveniently located.

8. A soiled holding room should be provided with waste receptacles and soiled linen receptacles. Storage for patients' belongings should be provided.

9. A housekeeping room should be provided and should contain a floor receptor or service sink and storage space for housekeeping supplies and equipment; it should be located nearby.

10. Appropriate areas should be available for male and female personnel for staff clothing change area and lounge. The areas should contain lockers, shower, toilet, and handwashing stations.

11. A waiting room, toilet with handwashing stations, drinking fountain, public telephone, and seating accommodations for waiting periods should be available or accessible to the unit.

D. Electrical Requirements

1. Grounding of hyperbaric chambers should be connected only to the equipment ground in accordance with NFPA 99 and NFPA 70.

2. Additional grounds such as earth or driven grounds should not be permitted.
SECTION 78: PHYSICAL FACILITIES, HELICOPTER LANDING AREA.

Helicopter landing area (if provided) shall be documented.

A. Safe planning for the helicopter service shall include the following:
   1. Plot plan showing the heliport for Department of Health files and inspection; and
   2. More than one approach/departure route.

B. Service shall be as close to the emergency service at the hospital as can be accomplished safely. The Department of Health will consider that a helicopter landing area does exist upon repeated or regular use of a location.

C. See NFPA 418 for roof top heliports.

NOTE: If there are wire obstacles, wire markers are available at no charge. They shall be picked up at the Arkansas Department of Aeronautics.
SECTION 79: PHYSICAL FACILITIES, FREESTANDING AMBULATORY SURGERY CENTERS.

A. General Construction Considerations. See Section 47.B, Physical Facilities.

B. Site Location, Inspection, Approval, and Subsoil Investigation. See Section 47.C-G, I and J, Physical Facilities.

C. Construction Documents. See Section 47.H, Physical Facilities.

D. Codes and Standards. See Section 47.B and K, Physical Facilities.

E. General. Outpatient surgery is performed without anticipation of overnight patient stay. The functional program shall describe in detail staffing, patient types, hours of operation, function and space relationships, transfer provisions, and availability of offsite services.

Visual and audible privacy shall be provided by design and include the registration, preparation, examination, treatment, and recovery areas.

F. If the ambulatory surgery center is part of an acute care hospital or other medical facility, service may be shared to minimize duplication as appropriate. Where outpatient surgical services are provided within the same area or suite as inpatient surgery.

G. Size. The extent (number and types) of the diagnostic, clinical, and administrative facilities to be provided will be determined by the services contemplated and the estimated patient load as described in the functional program. Provisions shall be made for patient examination, interview, preparation testing, and obtaining vital signs of patient.

H. Parking. Four spaces for each room routinely used for surgical procedures plus one space for each staff member should be provided. Additional parking spaces convenient to the entrance for pickup of patients after recovery should be provided.

I. Administration and Public Areas. The following shall be provided:

1. A covered entrance for pickup of patients after surgery.

2. A lobby area including a waiting area, conveniently accessible wheelchair storage, a reception/information desk, accessible public toilets, public telephone(s), drinking fountain(s).

3. Interview space(s) for private interviews relating to admission, credit, and demographic information gathering.

4. General and individual office(s) for business transactions, records, and administrative and professional staff. These shall be separate from public and patient areas with provisions for confidentiality of records. Enclosed office spaces for administration and consultation shall be provided.

5. Multipurpose or consultation room(s).
6. A medical records room equipped for dictating, recording and retrieval.

7. Special storage, including locking drawers and/or cabinets, for staff personnel effects.

8. General storage facilities (50 square feet per operating room).

J. Sterilizing Facilities. A system for sterilizing equipment and supplies shall be provided. When sterilization is provided off site, adequate sterile supplies shall be provided. If onsite processing facilities are provided, they shall include the following:

1. Soiled Workroom. This room shall be physically separated from all other areas of the department. Work space shall be provided to handle the cleaning and terminal sterilization/disinfection of all medical/surgical instruments and equipment. The soiled workroom shall contain work tables, sinks, flush-type devices, and washer/sterilizer decontaminators or other decontamination equipment. Pass-through doors and washer/sterilizer decontaminators shall deliver into clean assembling areas/workrooms.

2. Clean Assembly/Workroom. This room shall contain sterilization equipment. This workroom shall contain handwashing stations, work space, and equipment for terminal sterilizing of medical and surgical equipment and supplies. Access to sterilization room shall be restricted. This room is exclusively for the inspection, assembly, and packaging of medical/surgical supplies and equipment for sterilization and shall contain work tables, counters, ultrasonic cleaning facilities for backup supplies and instrumentation or equipment. The room shall be designed to hold sterilizer carts for loading or prepared supplies for sterilization.

3. Clean/Sterile Storage. Storage for packs, etc., shall include provisions for ventilation, humidity, and temperature control.

K. Clinical Facilities. Provisions shall be made to separate pediatric from adult patients. This shall include pre- and post-operative care areas and shall allow for parental presence.

1. At least one room shall be provided for examination and testing of patients prior to surgery, assuring both visual and audible privacy. This may be an examination room or treatment room, as required by the written functional program. Each room shall have a minimum floor area of 80 square feet, excluding vestibules, toilets, and closets. Room arrangement shall permit at least two feet eight inches clearance at each side and at the foot of the examination table. A handwashing fixture and a counter or shelf space for writing shall be provided.

2. Treatment room(s) for minor surgical and cast procedures shall have a minimum floor area of 120 square feet excluding vestibules, toilets, and closets. The minimum room dimension shall be ten feet.

3. Each operating room shall have a minimum clear area of 360 square feet, exclusive of cabinets and shelves, but may be larger to accommodate the functional plan which requires additional staff and/or equipment. An emergency communication system connected with the surgical suite control station shall be provided. There shall be at least one X-ray film illuminator in each room.
4. Room(s) for post-anesthesia recovery shall be provided as required by volume and procedure type (two per operating room is the minimum). At least three feet shall be provided at each side and at the foot of each bed as needed for work and/or circulation. If pediatric surgery is part of the program, separation from the adult section and space for parents shall be provided. Soundproofing of the area and the ability to view the patient from the nursing station shall be considered. Bedpans shall be supplied in this area.

5. A supervised post-recovery area shall be provided for patients who do not require post-anesthesia recovery but need recovery time prior to leaving the facility.

6. The following services shall be provided in surgical service areas:

   a. A control station located to permit visual surveillance of all traffic entering the operating suite.

   b. A drug distribution station for the storage and preparation of medications to be administered to patients. The station shall include refrigeration for medications, double-locked security for controlled substances and convenient access to handwashing stations.

   c. Scrub facilities shall be located near the entrance to each operating room. Stations may serve two operating rooms if needed, but shall be arranged to minimize incidental splatter on nearby personnel or supply carts.

   d. A soiled workroom which includes a clinical sink or equivalent flushing-type fixture, a work counter, a sink for handwashing, and waste receptacle(s).

   e. Fluid waste disposal facilities convenient to the general operating rooms. Note: A clinical sink or equivalent equipment in a soiled workroom shall meet this requirement.

   f. Anesthesia storage facilities in accordance with NFPA 99.

   g. Medical gas supply and storage to include space for reserve nitrous oxide and oxygen cylinders.

   h. Storage room(s) for equipment and supplies used in the surgical suite.

   i. Appropriate change areas for staff working within the surgical suite. The areas shall include lockers, showers, toilets, lavatories for handwashing, and space for donning scrub attire.

   j. A separate patient change area which includes waiting room(s), lockers, toilets, clothing change or gowning area(s), and space for medication administration. The functional program shall include provisions for securing patients' personal effects.

   k. A convenient stretcher storage area out of the direct line of traffic.
l. A housekeeping room which includes a floor receptor or service sink and space for housekeeping supplies and equipment. This room shall be for the exclusive use of the surgical suite.

m. Space for temporary storage of wheelchairs.

n. Convenient access to and use of emergency crash carts for both the surgical and recovery areas.

o. An area for the storage and processing of clean and soiled linen.

p. Laundry Services shall conform to Section 68, Physical Facilities, Linen Service.

L. Diagnostic Facilities. Diagnostic services shall be provided on or offsite for preadmission tests as required by the functional program.

M. Details and Finishes. All details and finishes shall meet the standards in Section 72, Physical Facilities, Details and Finishes, with the following exceptions:

   a. Minimum patient corridor width shall be five feet, except that corridors in the operating room section, where patients are transported on stretchers or beds, shall be eight feet wide. Passages and corridors used exclusively for staff access may be forty-four inches in clear width.

   b. Patient toilet rooms shall be equipped with doors and hardware that permit access from the outside in emergencies.

   c. Flammable anesthetics shall not be used.

N. Finishes. Finishes shall conform to Section 72, Physical Facilities, Details and Finishes.

O. Plumbing. Plumbing shall conform to Section 75, Physical Facilities, Plumbing and Other Piping Systems.

P. Electrical. Electrical installations shall conform to Section 76, Physical Environment, Electrical Standards, with the following exceptions:

   1. Eight hours of on-site fuel for the emergency generator.

   2. Emergency call system is required in all patient toilet rooms.

Q. Fire Alarm System. A manually operated, electrically supervised fire alarm system shall be installed in each facility as described in NFPA 101.

R. Mechanical. Mechanical systems shall conform to Section 74, Physical Facilities, Mechanical Requirements, with the exception that stand-by fuel requirements shall be eight hours.

S. Extended Recovery Time. See Section 39.M.
SECTION 80: PHYSICAL FACILITIES, OUTPATIENT CARE FACILITIES.

A. General Considerations. See Section 47.A, Physical Facilities.

1. This section applies to the outpatient care unit licensed under the facility as a department and under the rule of the Governing Body. An outpatient care unit can be a part of the facility or a separate freestanding facility. An outpatient unit within the main facility building shall be located so outpatients do not traverse inpatient areas.

2. The general standards set forth in the following sections shall apply to each of the items below.
   a. Outpatient psychiatric centers;
   b. Primary care outpatient centers; and
   c. Diagnosis and/or treatment centers.

3. Each element provided in the outpatient care facility shall be described in the written functional program and meet the requirements outlined herein as a minimum.

B. General Construction Considerations. See Section 47.A, Physical Facilities.


D. Construction Documents. See Section 47.K, Physical Facilities.

E. Codes and Standards. New/existing Outpatient Care Facilities which do not meet the criteria established by NFPA, Life Safety Code Volume 101 for healthcare and/or ambulatory healthcare occupancies may be classified as a Business Occupancy as defined in LSC 101, Chapter 38 (new)/39 (existing) with exceptions noted within these regulations.

F. General Requirements for Outpatient Care Facilities. As needed the following elements shall be provided to satisfy the functional program:

1. Functional Program. See Section 47, Physical Facilities.

2. Parking. Each facility should provide adequate parking for staff and patients.

3. Patient Privacy. Each facility design shall ensure patient audible and visual privacy during interview, examination, treatment and recovery.

4. Administration and Public Areas. The following shall apply to each outpatient care facility described herein with additions and/or modification as noted for each specific type.
   a. Entrance. Located at grade level and able to accommodate wheelchairs.
b. Public services shall include:
   1) Conveniently accessible wheelchair storage;
   2) A reception and information counter or desk;
   3) Waiting space(s). Where an organized pediatric service is part of the outpatient care facility, provisions shall be made for separating pediatric and adult patients;
   4) Public toilets;
   5) Drinking fountain; and
   6) Public telephones.

c. Interview space(s). Private interviews related to social services, credit, etc. shall be provided.

d. General or individual offices for business transactions, records, administrative and professional staffs shall be provided.

e. Clerical space or rooms for typing, clerical work, and filing, separated from public areas for confidentiality, shall be provided.

f. Multipurpose room(s) equipped for visual aids shall be provided for conferences, meetings and health education purposes.

g. Special storage for staff personal effects with locking drawers or cabinets (may be individual desks or cabinets) shall be provided. Such storage shall be near individual work stations and staff controlled.

h. General storage facilities for supplies and equipment shall be provided as needed for continuing operation.

i. In new construction and renovation where hemodialysis or hemoperfusion are routinely performed, there shall be a separate water supply and a drainage facility that do not interfere with handwashing.

5. General purpose examination rooms. For medical, and similar examinations, rooms shall have a minimum floor area of 80 square feet, excluding vestibules, toilets, and closets. Room arrangement shall permit at least two feet eight inches clearance at each side and at the foot of the examination table. A handwashing fixture and a counter or shelf space for writing shall be provided.

6. Special-purpose examination rooms. Rooms for special clinics such as eye, ear, nose, and throat examinations, if provided, shall be designed and outfitted to accommodate procedures and equipment used. A handwashing stations and a counter or shelf space for writing shall be provided.
7. Treatment Room(s). Rooms for diagnosis and/or treatment if provided, shall have a minimum floor area of 120 square feet, excluding vestibule, toilet, and closets. The minimum room dimension shall be ten feet. A handwashing fixture and counter or shelf for writing shall be provided.

8. Observation room(s). Observation rooms for the isolation of suspect or disturbed patients shall have a minimum floor area of 80 square feet and shall be convenient to a nurse or control station. This is to permit close observation of patients and to minimize possibilities of patients’ hiding, escape, injury, or suicide. An examination room may be modified to accommodate this function. A toilet room with lavatory should be immediately accessible.

9. Control Station. A work counter, communication system, space for supplies, and provisions for charting shall be provided.

10. Medication Distribution Station. This may be a part of the control station and shall include a work counter, sink, refrigerator, and locked storage for biologicals and medications.

11. Clean Holding. A separate room or closet for storing clean and sterile supplies shall be provided. This storage shall be in addition to that of cabinets and shelves.


13. Sterilizing Facilities. A system for sterilizing equipment and supplies shall be provided, if required by the functional program.

14. Wheelchair Storage Space. Such storage shall be out of the direct line of traffic.

15. The need for and number of required airborne infection isolation rooms shall be determined by an infection prevention and control risk assessment. When required, the airborne infection isolation room(s) shall comply with the general requirements of Section 48.C.


17. Laboratory. See Section 59, Physical Facilities, Laboratory Services.

18. Rehabilitation Services. See Section 81, Physical Facilities, Rehabilitation Facilities.


20. Staff Facilities. See Section 70, Physical Facilities, Engineering Service and Equipment Areas.

22. Social Spaces/Group Therapy. See Section 82, Physical Facilities for Psychiatric Hospitals – F.3 Service Areas

23. Details shall comply with the following standards:
   a. Minimum patient corridor width shall be five feet. Staff only corridors may be 44 inches wide.
   b. Each building shall have two exits that are remote from each other. Other details relating to exits and fire safety shall comply with NFPA 101 and the standards outlined herein.
   c. Items such as drinking fountains, telephone booths, vending machines, etc., shall not restrict corridor traffic or reduce corridor width below the minimum. Out of traffic storage space for portable equipment shall be provided.
   d. The minimum nominal door width for patient use shall be three feet. If the outpatient facility services hospital inpatients, the minimum nominal width of doors to rooms used by hospital inpatients transported in beds shall be three feet eight inches.
   e. Doors, sidelights, borrowed lights, and windows glazed to within 18 inches of the floor shall be constructed with safety glass, wired glass, or similar materials. Glazing materials used for shower doors and bath enclosures shall be safety glass or plastic.
   f. Threshold and expansion joints covers shall be flush with the floor surface.
   g. Handwashing stations shall be located and arranged to permit proper use and operation.
   h. Provisions for hand drying shall be included at all handwashing stations.
   i. Radiation protection for X-ray and gamma ray installations shall be in accordance with the rules and regulations of the Arkansas Department of Health.
   j. The minimum ceiling height shall be seven feet eight inches.

24. Finishes shall comply with the following:
   a. Cubicle curtains and draperies shall be noncombustible or flame-retardant and shall pass both the large- and small-scale tests required by NFPA 701.
   b. The flame spread and smoke development ratings of finishes shall comply with NFPA 101, Chapter 38.
   c. Floor materials shall be readily cleanable and appropriately wear-resistant. In all areas subject to wet cleaning, floor materials shall not be physically affected by liquid germicidal and cleaning solutions. Floors subject to traffic while wet, including showers and bath areas, shall have a nonslip surface.
d. Wall finishes shall be washable, and in the proximity of plumbing fixtures, shall be smooth and water resistant.

e. Wall bases in areas frequently subject to wet cleaning methods shall be monolithic and coved with the floor, tightly sealed to the wall, and constructed without voids.

f. Floor and wall areas penetrated by pipes, ducts, and conduits shall be tightly sealed to minimize entry of rodents and insects. Joints of structural elements shall be similarly sealed.


26. Mechanical, Plumbing and Electrical.

   a. Small Outpatient Clinics that provide space and equipment serving four or fewer direct patient care workers at one time shall comply with the following minimum requirements:

      1. Emergency lighting shall be connected to rechargeable back-up batteries as a means of emergency illumination.

      2. A protected premises fire alarm system as defined in Chapter 3, NFPA 72 is required.

   b. Large Outpatient Facilities that provide space and equipment for more than four direct patient care workers at one time shall comply with the following minimum requirements:

      1. Emergency lighting and power shall be provided in accordance with NFPA 99, NFPA 101, and NFPA 110.

      2. Any fire alarm system shall be as required by NFPA 101 and installed per NFPA 72.

      3. The installation, testing, and certification of nonflammable medical gas and air systems shall comply with the requirements of NFPA 99.

      4. Clinical vacuum system installed shall be in accordance with NFPA 99.

      5. All electrical material and equipment shall be installed, tested and certificated in accordance with NFPA 70 and NFPA 99.

   6. The mechanical system shall comply with Section 74, Physical Facilities, Mechanical Requirements, with the following exceptions:

      a) Redundant space heating and water heating capability are not required, unless required by the written functional program;
b) Ducted return air systems are not required, unless required by the written functional program; and

c) Stand-by fuel for space and water heating is not required.

7. A nurses emergency call system shall be provided for all patient use at each patient toilet, bath, sitz bath and shower room. This system shall be accessible to a patient lying on the floor. Inclusion of a pull cord shall satisfy this standard.

8. Fire extinguisher(s) shall be provided and be easily accessible per NFPA requirements.

G. Endoscopy refer to Section 53.D
SECTION 81: PHYSICAL FACILITIES, REHABILITATION FACILITIES.

A. General Considerations. Rehabilitation facilities may be organized under hospitals (organized departments of rehabilitation), outpatient clinics, rehabilitation centers, and other facilities designed to serve either single- or multiple-disability categories including but not limited to: cerebrovascular, head trauma, spinal cord injury, amputees, complicated fractures, arthritis, neurological degeneration, genetic, and cardiac. In general, rehabilitation hospitals shall have larger space requirements than general hospitals, have longer lengths of stay and have less institutional and more residential environments.

B. General Construction Considerations. See Section 47.A, Physical Facilities.


D. Construction Documents. See Section 47.K, Physical Facilities.

E. Codes and Standards. See Section 47.A and O, Physical Facilities.

F. Functional Units and Service Areas.

1. Required units. Each rehabilitation facility shall contain a medical evaluation unit and shall provide the following service areas, if the services are not otherwise conveniently accessible to the facility and appropriate to program functions:

   a. Psychological services;
   b. Social services;
   c. Vocational services;
   d. Patient dining, recreation and day spaces;
   e. Dietary;
   f. Personal care facilities;
   g. Space for teaching activities of daily living;
   h. Administration Department;
   i. Medical Records;
   j. Engineering service and equipment areas;
   k. Laundry Services;
   l. Housekeeping Rooms;
m. Employees' facilities;
n. Nursing unit;
o. Physical therapy;
p. Occupational therapy; and
q. Speech and hearing.

2. Optional Units. The following special services areas, if required by the functional program, shall be provided as outlined in these sections. The sizes of the various departments will depend upon the services to be provided:

a. Sterilizing facilities;
b. Prosthetics and orthotics;
c. Dental;
d. Radiology;
e. Pharmacy;
f. Laboratory;
g. Home health;
h. Outpatient services; and
i. Therapeutic pool.

G. Evaluation Unit.

1. Office(s) for Personnel.

2. Examination Rooms. The rooms shall have a minimum floor area of 140 square feet excluding such spaces as the vestibule, toilet, closet, and work counter (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 and storage facilities, and a desk, counter, or shelf space for writing.

3. Evaluation Rooms. The room areas shall be arranged to permit appropriate evaluation of patient needs and progress and to determine specific programs of rehabilitation. Rooms shall include a desk and work area for the evaluators, writing and work space for patients, and storage for supplies. Where the facility is small and workload light, evaluation may be done in the examination room.

4. Laboratory Facilities. Facilities shall be provided within the rehabilitation department or through contract arrangement with a nearby hospital or laboratory service for hematology, clinical chemistry, urinalysis, cytology, pathology, and bacteriology. If
these facilities are provided through contract, the following minimum laboratory services shall be provided in the rehabilitation facility:

a. Laboratory work counter(s) with a sink, and gas and electric service;
b. Handwashing stations;
c. Storage cabinet(s) or closet(s); and
d. Specimen collection facilities. Urine collection rooms shall be equipped with a water closet and lavatory. Blood collection facilities shall have space for a chair and work counter.

5. Imaging Facilities. Imaging facilities, if required by the functional program, shall be in accordance with Section 56, Physical Facilities, Imaging Suite.

H. Psychological Service. Office(s) and work space for testing, evaluation, and counseling shall be provided.

I. Social Service. Office space(s) for private interviewing and counseling shall be provided.

J. Vocational Services. Office(s) and work space for vocational training, counseling, and placement shall be provided.

K. Dining, Recreation, and Day Spaces.

The following standards shall be met for patient dining, recreation, and day spaces (areas may be in separate or adjoining spaces):

1. Inpatient and residents shall have a total of 55 square feet per bed.

2. Outpatients, if dining is part of the day care program, a total of 55 square feet per person shall be provided. If dining is not part of the program, at least 35 square feet per person shall be provided for recreation and day spaces.

3. Storage spaces shall be provided for recreation equipment and supplies.

L. Dietary Department. See Section 63, Physical Facilities, Dietary Facilities.

M. Personal Care Unit for Inpatients. A separate room with appropriate fixtures and utilities shall be provided for patient grooming. The activities for daily living unit may serve this purpose.

N. Activities for Daily Living Unit. An area for teaching daily living activities shall be provided. It shall include a bedroom, bath, kitchen, and space for training stairs. Equipment shall be functional. The bathroom shall be in addition to other toilet and bathing requirements. The daily living area shall be similar to a residential environment for the purpose of facilitating the patient's skill for daily living.

O. Administration Department and Medical Records. See Sections 64, Physical Facilities, Administration and Public Areas.
P. Engineering Service and Equipment Areas. See Section 70, Physical Facilities, Engineering Service and Equipment Areas.


R. Housekeeping Rooms. See Section 69, Physical Facilities, Cleaning and Sanitizing Carts and Environmental Services.

S. Employee Facilities. See Section 70, Physical Facilities, Engineering Service and Equipment Areas.

T. Nursing.

1. The nursing units for rehabilitation facilities shall follow the standards as described in Section 48, Physical Facilities, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease), with the following exceptions:

   a. Patient Rooms. Minimum areas exclusive of toilet rooms, closets, lockers, wardrobes, alcoves, or vestibules shall be 140 square feet in single-bed rooms and 125 square feet per bed in semi-private rooms.

   b. Each patient shall have access to a toilet room without having to enter the general corridor area. One toilet room shall serve no more than four beds and no more than two patient rooms. The toilet room shall contain a water closet, a handwashing fixture and a tub and/or shower. The handwashing fixture may be omitted from a toilet room that serves single-bed and two bed rooms if each such patient's room contains a handwashing fixture. Each toilet room shall be of sufficient size to ensure that wheelchair users and staff shall have access.

   c. Each patient shall have access to a wardrobe, closet, or locker with minimum clearance of one foot ten inches by one foot eight inches. A clothes rod and adjustable shelf shall be provided.

2. Nursing Unit Service Areas shall follow the standards described in Section 48, Physical Facilities, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease), with the following exceptions:

   a. Patient Bathing Facilities. At least one island-type bathtub and/or gurney shower shall be provided in each nursing unit. Each tub and/or shower shall be in an individual room or privacy enclosure that provides space for the private use of bathing fixtures, for drying and dressing, and for a wheelchair and an assistant. Showers in central bathing facilities shall be at least four feet square, curb-free and designed for use by a wheelchair patient;

   b. At least one room on each floor containing a nursing unit shall be provided for toilet training. It shall be accessible from the nursing corridor. A minimum clearance of three feet shall be provided at the front and at each side of the water closet. The room shall also contain a lavatory; and

   c. Handrails shall be provided on both sides of corridors used by patients. A clear distance of one and one-half inches shall be provided between the handrail and
the wall, and the top of the rail shall be 34 inches minimum and 36 inches maximum above the floor. Exceptions for height shall be for special care areas such as those serving children.

U. Sterilizing Facilities. See Section 69, Physical Facilities, Cleaning and Sanitizing Carts and Environmental Services.

V. Rehabilitation Therapy. See Section 60, Physical Facilities, Rehabilitation Therapy Department.

W. Pharmacy Unit. See Section 62, Physical Facilities, Pharmacy.

X. Details and Finishes. See Section 72, Physical Facilities, Details and Finishes.


AA. Elevators. See Section 73, Physical Facilities, Electrical Standards.

BB. Mechanical, Plumbing and Electrical Standards. See Sections 74, 75 and 76.
SECTION 82: PHYSICAL FACILITIES, PSYCHIATRIC HOSPITALS
AND ALCOHOL/DRUG ABUSE INPATIENT TREATMENT CENTERS.

A. General Considerations. See Section 47.A, Physical Facilities.

B. General Construction Consideration. See Section 47.A, Physical Facilities.

1. The facility shall provide a therapeutic environment appropriate for the planned treatment programs. Security appropriate for the planned treatment programs shall be provided. The area shall be characterized by a feeling of openness, with emphasis on natural light and exterior view. Interior finishes, lighting, and furnishings shall suggest a residential rather than an institutional setting. These shall, however, conform with applicable fire safety codes. Security and safety devices shall not be presented in a manner to attract or challenge tampering by patients. Design, finishes, and furnishings shall be such as to minimize the opportunity for residents to cause injury to themselves or others. Special design considerations for injury and suicide prevention shall be given to the following elements:

a. Visual control of nursing units and passive activity areas such as day rooms and outdoor areas;

b. Hidden alcoves or enclosed spaces;

c. Areas secured from patients access such as staff areas and mechanical space;

d. Door closers, latch handles and hinges;

e. Door swings to private patient bathrooms;

f. Shower, bath, toilet, and sink plumbing fixtures, hardware and accessories including grab bars and toilet paper holders;

g. Windows including interior and exterior glazing;

h. Light fixtures, electrical outlets, electrical appliances, nurse call systems, and staff emergency assistance systems;

i. Ceilings, ventilation grilles, and access panels in patient bedrooms and bathrooms;

j. Sprinkler heads and other protrusions; and

k. Fire extinguisher cabinets and fire alarm pull stations.


D. Construction Documents. See Section 47.K, Physical Facilities.

E. Codes and Standards. See Section 47.A and O, Physical Facilities.
F. General Requirements for Psychiatric Hospitals and Alcohol/Drug Abuse Inpatient Treatment Centers.

1. Nursing Unit. See Section 52, Physical Facilities, Psychiatric Nursing Unit. (Seclusion Room is not required in the Alcohol/Drug Unit.)

2. Patient Rooms. See Section 52, Physical Facilities, Psychiatric Nursing Unit.

3. Service Areas. The service areas shall follow the standards described in Section 52, Physical Facilities, Psychiatric Nursing Unit, with the following exceptions:
   a. At least two separate social spaces, one appropriate for noisy activities and one for quiet activities, shall be provided. The combined area shall be a minimum of 30 square feet per patient with a minimum of 120 square feet for each of the two spaces. This space may be shared by dining activities if an additional 15 square feet per patient is added; otherwise provide 20 square feet per patient for dining. Dining facilities may be located off the nursing unit in a central area;
   b. Space for group therapy shall be provided. This may be combined with the quiet space noted above when the unit accommodates not more than 12 patients and when at least 225 square feet of enclosed private space is available for group therapy activities;
   c. Patient laundry facilities with an automatic washer and dryer shall be provided;
   d. Examination and treatment room(s). The examination and treatment room(s) may serve several nursing units and shall be on the same floor and conveniently located for routine use. Examination rooms shall have a minimum floor area of 120 square feet excluding space for vestibule, toilets, and closets. The room shall contain a lavatory or sink equipped for handwashing, storage facilities, and desk, counter, or shelf space for writing;

4. Outpatient Clinic Services. See Section 80, Physical Facilities, Outpatient Care Facilities.


7. Physical Therapy Suite. See Section 60, Physical Facilities, Rehabilitation Therapy Department.

8. Occupational Therapy Suite. See Section 60, Physical Facilities, Rehabilitation Therapy Department.


11. Administration and Public Areas. See Section 64, Physical Facilities, Administration and Public Areas.

12. Medical Record Unit. See Section 65, Physical Facilities, Health Information Unit.


15. Facilities for Cleaning and Sanitizing Carts and Environmental Services. See Section 69, Physical Facilities, Cleaning and Sanitizing Carts and Environmental Services.


19. Details and Finishes. See Section 72, Physical Facilities, Details and Finishes.


22. Mechanical, Plumbing and Electrical Requirements. See Sections 74, 75 and 76.
SECTION 83: PHYSICAL FACILITIES, INFIRMARIES.

A. General Considerations. See Section 47.A, Physical Facilities.

B. General Construction Considerations. See Section 47.A, Physical Facilities.


D. Construction Documents. See Section 47.K, Physical Facilities.

E. Codes and Standards. See Section 47.A and O, Physical Facilities.

F. General Requirements for Infirmaries.
   2. Nursing Unit (Medical). NOTE: The infirmaries shall only provide medical services as stated in Section 48, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease).
      a. Patient Rooms. See Section 48, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease).
      b. Service Areas. See Section 48, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease).
      c. Isolation Rooms. See Section 48, Patient Accommodations (Adult Medical, Surgical, Communicable or Pulmonary Disease).

G. Outpatient Clinic.
   1. General. NOTE: The outpatient facilities, if provided shall be contained within the infirmary only. See Section 80, Physical Facilities, Outpatient Care Facilities.
   2. Outpatient Clinical Services. See Section 80, Physical Facilities, Outpatient Care Facilities.
   3. Administration and Public Areas. See Section 80, Physical Facilities, Outpatient Care Facilities.
   4. Clinical Facilities. See Section 80, Physical Facilities, Outpatient Care Facilities.

H. Radiology Suite, if provided. See Section 56, Physical Facilities, Imaging Suite. NOTE: Mobile CT, MRI and Litho Units shall not be provided at infirmaries.

I. Laboratory Suite. See Section 59, Physical Facilities, Laboratory Services.

J. Physical Therapy and Respiratory Care Suite. See Section 60, Physical Facilities, Rehabilitation Therapy Department.