

COMPLIANCE CHECKLIST

IP1: Medical/Surgical Nursing Unit

The following checklist is intended to be used in the plan review applications for health care facilities submitted to the Massachusetts Department of Public Health. This checklist summarizes and references the applicable requirements from the Licensure Regulations and the 2014 Edition of the FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities. Applicants must verify compliance of the plans submitted to the Department with all referenced requirements from the Licensure Regulations and FGI Guidelines when completing this Checklist. A separate Checklist must be completed for each nursing unit, hospital or clinic department, or clinical suite.

Other jurisdictions, regulations and codes may have additional requirements which are not included in this checklist, such as:

- NFPA 101 Life Safety Code (2000) and applicable related standards contained in the appendices of the Code
- State Building Code (780 CMR)
- Joint Commission on the Accreditation of Health Care Organizations
- CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities
- USP 797
- Accessibility Guidelines of the Americans with Disabilities Act (ADA)
- Architectural Access Board Regulations (521 CMR)
- Local Authorities having jurisdiction.

Instructions:

1. All requirement lines must be completed according to the following instructions and included in the plan submissions for Self-Certification Process or Part II of the Abbreviated Review Process.
2. This checklist must be completed by the project architect or engineer based on the design actually reflected in the plans at the time of completion of the checklist.
3. Each requirement line (____) of this Checklist must be completed exclusively with one of the following symbols, unless otherwise directed in the checklist. If a functional space is not affected by a renovation project, the symbol "E" may be indicated on the requirement line (____) before the name of the functional space (associated requirements on indented lines below that name, or associated MEP requirements do not have to be completed in this case). If more than one functional space serves a given required function (e.g. patient room or exam room), that clarification should be provided in the Project Narrative, and the requirement lines are understood to only address the functional spaces that are involved in the project.

X = Requirement is met, for new space, for renovated space, or for existing direct support space for an expanded service.

= Check box under section titles or individual requirements lines for optional services or functions that are not included in the project area.

E = Requirement relative to an existing suite or area that has been *licensed* for its designated function, is *not affected* by the construction project and *does not pertain to a required direct support space* for the specific service affected by the project.

W = Waiver requested for specific section of the Regulations or FGI Guidelines, where hardship in meeting requirement can be demonstrated (a Physical Plant Waiver Form must be completed for each waiver request).

4. All room functions marked with "X" must be shown on the plans with the same name labels as in this checklist.
5. Mechanical, electrical & plumbing requirements are only partially mentioned in this checklist. The relevant section of the FGI Guidelines must be used for project compliance with all MEP requirements and for waiver references.
6. Oxygen, vacuum, medical air, and waste anesthesia gas disposal outlets (if required) are identified respectively by the abbreviations "OX", "VAC", "MA", & "WAGD".
7. Requirements referenced with "FI" result from formal interpretations from the FGI Interpretations Task Group.
8. The location requirements including asterisks (*) refer to the definitions of the Glossary in the beginning section of the FGI Guidelines.

Facility Name:

DoN Project Number: (if applicable)

Facility Address:

Nursing Unit Bed Complements:

Current = Proposed =

Satellite Name: (if applicable)

Building/Floor Location:

Satellite Address: (if applicable)

Submission Dates:

Initial Date:

Revision Date:

Project Description:

Architectural Requirements
MEDICAL/SURGICAL NURSING UNIT

Building Systems Requirements

2.2-2.2

2.2-2.2.2

PATIENT ROOM

2.2-2.2.2.1

Capacity:

New Patient Room:

(1)

check if not included in project

___ 1 bed per room

Existing Patient Room:

(2)

check if not included in project

___ maximum room capacity no more than present capacity, with

maximum of 4 patients in each room

2.2-2.2.2.2

Space Requirements:

(1)

(a)

___ patient rooms sized to accommodate needs of clinical services

___ single-bed rooms

check if not included in project

(1)(b)

___ min. clear floor area 120 sf

(2)(a)

___ min. clearance 3'-0" between sides of bed & any wall or any other fixed obstruction

(2)(b)

___ min. clearance 3'-0" between foot of bed & any wall or any other fixed obstruction

___ multiple bed rooms

check if not included in project

(1)(b)

___ min. clear floor area 100 sf per bed

___ min. clearance 3'-0" between sides of bed & any wall or any other fixed obstruction

(2)(b)

___ min. 4'-0" clearance at foot of each bed for passage of beds & equipment

(2)(a)

Glossary

Bed Size for Determining Clearances:

___ 40" wide by 96" long

or

___ specifications of beds to be installed are attached to checklist

2.1-2.2.4

Patient Privacy:

2.1-2.2.4.1

___ Means to provide visual privacy from observation by other patients & visitors available for each patient

2.1-2.2.4.2

___ Design for privacy does not restrict patient access to entrance, handwashing station, or toilet

Ventilation*:

___ Min. 4 air changes/hour

Table 7.1

Power*:

___ Min. 12 receptacles

Table 2.1-1

___ Min. 2 receptacles at each side of the head of the bed

___ Min. 2 receptacles on all other walls (may be omitted on exterior wall)

Nurse Call System*:

___ Patient station

Table 2.1-2

___ Emergency staff assistance station

Medical Gases*:

___ 1 OX, 1 VAC for each bed

Table 2.1-4

**Common requirements for all patient rooms*

Architectural Requirements

Building Systems Requirements

- 2.1-2.2.5 Handwashing Station in Patient Room:
- 2.1-2.2.5.1
 - ___ Provided in patient room in addition to that in toilet room
 - (1) ___ Handwashing station adjacent* to entrance to patient room for use by health care personnel & others
 - Multi-Patient Rooms:
 - check if not included in project
 - (2) ___ located outside cubicle curtains
- 2.1-2.2.6 ___ Patient toilet room
- 2.1-2.2.6.2 ___ serves no more than one patient room
- ___ serves no more than 2 patients
- 2.1-2.2.6.3
 - (1) ___ toilet
 - (2) ___ handwashing station
 - (3) ___ bedpan washer
- 2.2-2.2.2.7 ___ Patient bathing facilities
 - (1) ___ access to bathing facilities in toilet room directly accessed from each patient room or in central bathing facility
 - (2) ___ central bathing facilities
 - (a) check if not included in project (only if each patient room has direct access to adjoining shower or bathtub)
 - (b) ___ each bathtub or shower in individual room or enclosure that provides privacy for bathing, drying & dressing
 - ___ at least 1 central bathing facility with shower or bathtub for each 12 beds without such facilities
 - (c) ___ toilet in separate enclosure
 - ___ handwashing sink
 - ___ storage for soap & towels
 - (3) ___ mobile lifts, shower gurney devices, wheelchairs & other portable wheeled equipment are used
 - check if not included in project
 - (a) ___ doorways designed to allow entry of portable/mobile mechanical lifts & shower gurney devices
 - (b) ___ thresholds designed to facilitate use & prevent tipping of wheelchairs & other portable wheeled equipment
 - (c) ___ patient shower rooms designed to allow entry of portable/mobile mechanical lifts & shower gurney devices
 - (d) ___ floor drain grates designed to facilitate use & prevent tipping of wheelchairs & other portable wheeled equipment used by patients & staff

Ventilation:
 ___ Min. 10 air changes per hour Table 7.1
 ___ Exhaust

Ventilation:
 ___ Min. 10 air changes per hour Table 7.1
 ___ Exhaust
 ___ Negative pressure

Architectural Requirements

Building Systems Requirements

2.1-2.2.8 Patient Storage:
 ___ separate wardrobe, locker, or closet suitable for garments & for storing personal effects

2.2-2.2.3.1 ___ Family zone support features
 (1) ___ space for movable seating with min. one seat for family member or visitor & one seat for patient
 (a) ___ space for min. one chair for long-term sitting
 (b) ___ family members or visitors permitted to sleep in patient room overnight
 (2) ___ check if not included in project
 ___ space for sleeping accommodation
 (3) ___ public communication services in each patient room

SPECIAL PATIENT CARE ROOMS

2.2-2.2.4 ___ Airborne Infection Isolation (AII) Room
 2.2-2.2.4.2 (2) ___ at least one AII room in hospital
 (a) ___ ICRA attached to Project Narrative to determine additional AII rooms for individual nursing units
 (b)

2.1-2.4.2.2 (1) ___ single-bed room
 (2) ___ provision made for personal protective equipment storage at entrance to room
 (3) ___ handwashing station in each patient room
 2.1-7.2.3.1(6) ___ monolithic floors with integral covered 6" high wall base

Ventilation:
 ___ Min. 12 air changes per hour Table 7.1
 ___ Exhaust
 ___ Negative pressure
 ___ No recirculating room units
 ___ Space ventilation & pressure relationship maintained in event of loss of normal electrical power 4/6.1.1
 ___ Exhaust air from AII rooms, associated anterooms & toilet rooms discharged directly to outdoors 4/7.2.1
 ___ Exhaust grilles or registers located directly above patient bed on ceiling or on wall near head of bed
 ___ Permanent device monitoring differential air pressure between AII room & corridor

2.1-2.4.2.2(4) ___ separate room with toilet, handwashing station & bathtub or shower
 Ventilation:
 ___ Min. 10 air changes per hour Table 7.1
 ___ Exhaust

Architectural Requirements

Building Systems Requirements

2.1-2.4.2.3 Anteroom
 check if not included in project
 (only if ICRA justifying the omission of the anteroom for the specific patient population is attached to Project Narrative)

- (1) for persons to don personal protective equipment before entering patient room
- (2) all doors to anteroom have self-closing devices

- 2.1-2.4.2.4(1)
- (b) self-closing devices on all room exit doors
- (c) doors have edge seals

2.2-2.2.4.4 Protective Environment (PE) Room
 check if not included in project
 (only if ICRA justifying the omission of the PE room for the specific patient population is attached to Project Narrative)

- 2.1-2.4.2.2
- (1) single-bed room
- (2) provision made for personal protective equipment storage at entrance to room
- (3) handwashing station in each patient room

2.1-7.2.3.1(6) monolithic floors with integral covered 6" high wall base

2.1-2.4.2.2(4) separate room with toilet, handwashing station & bathtub or shower

2.1-2.4.2.3 Anteroom
 check if not included in project

- (1) for persons to don personal protective equipment before entering patient room
- (2) all doors to anteroom have self-closing devices

Ventilation:
 Min. 10 air changes per hour Table 7.1
 Exhaust
 Negative pressure to corridor
 No recirculating room units
 AII room under negative pressure to anteroom 4/7.2.1
 Anteroom under negative pressure to corridor

Ventilation:
 Min. 12 air changes per hour Table 7.1
 Positive pressure
 No recirculating room units
 Space ventilation & pressure relationship maintained in event of loss of normal electrical power 4/6.1.1
 Supply air diffuser above patient 4/7.2.2
 Diffuser design limits air velocity for patient comfort
 Return/exhaust registers located near patient room door
 Permanent device monitoring differential air pressure between PE room & corridor

Ventilation:
 Min. 10 air changes per hour Table 7.1
 Exhaust

Ventilation:
 Min. 10 air changes per hour Table 7.1
 Exhaust
 Positive pressure to corridor
 No recirculating room units

Architectural Requirements

- 2.1-2.4.2.4(1)
 - (b) self-closing devices on all room exit doors
 - (c) doors has edge seals
- 2.2-2.2.4.4
 - (5) Special Design Elements:
 - (a) monolithic ceiling
 - all room surfaces cleanable
 - (b) lighting fixtures equipped with lenses & sealed
- 2.2-2.2.4.5 Combination airborne infection isolation/ protective environment (AII/PE) room
 - check if not included in project (only if no PE room required by ICRA)
 - (1)
 - 2.1-2.4.2.2
 - (1) single-bed room
 - (2) provision made for personal protective equipment storage at entrance to room
 - (3) handwashing station in each patient room
 - 2.1-7.2.3.1(6) monolithic floors with integral covered 6" high wall base
 - (4) separate room with toilet, handwashing station & bathtub or shower
- 2.1-2.4.2.3 Anteroom
 - (1) for persons to don personal protective equipment before entering patient room
 - (2) all doors to anteroom have self-closing devices
- 2.1-2.4.2.4(1)
 - (b) self-closing devices on all room exit doors
 - (c) doors has edge seals

Building Systems Requirements

- PE room under positive pressure to anteroom 4/7.2.2
- anteroom under positive pressure to corridor

- Ventilation:
 - Min. 12 air changes per hour Table 7.1
 - Exhaust
 - Positive pressure
 - No recirculating room units
 - Space ventilation & pressure relationship maintained in event of loss of normal electrical power 4/6.1.1
 - Supply air diffusers located above patient bed 4/7.2.3
 - Exhaust grilles or registers located near patient room door

- Ventilation:
 - Min. 10 air changes per hour Table 7.1
 - Exhaust

- Ventilation:
 - Min. 10 air changes per hour Table 7.1
 - Exhaust
 - No recirculating room units

- Positive pressure to both AII/PE room & corridor
- or**
- Negative pressure to both AII/PE room & corridor

Architectural Requirements

Building Systems Requirements

2.2-2.2.4.5

- (5) Special Design Elements:
 (a) ___ monolithic ceiling
 ___ all room surfaces cleanable
 (b) ___ lighting fixtures equipped with lenses & sealed

- (3) ___ anteroom
 (a) ___ space for persons to don personal protective equipment before entering patient room
 (b) ___ all doors to anteroom self-closing

- (4) ___
 or
 ___ door to corridor is equipped with door seals, including door sweep seal

- Ventilation:
 ___ Min. 10 air changes per hour Table 7.1
 ___ Exhaust
 ___ Positive or negative pressure to both patient room & corridor
 ___ No recirculating room units
 ___ Permanent device monitoring differential air pressure between PE room & anteroom 4/7.2.3
 ___ Permanent device monitoring differential air pressure between anteroom & corridor

2.2-2.2.4.6

- ___ Bone marrow/stem cell transplant unit
 check if not included in project
 (1) ___ close access to out-of-unit diagnostic imaging & radiation therapy equipment
 (2) ___ all patient rooms meet PE room requirements
 (3) ___ at least one patient room meets combination AII/PE room
 (4) Special Design Elements:
 (a) ___ sealed windows
 ___ viewing panels in doors or walls for nursing staff observation
 (b) ___ curtains or other means to cover windows & viewing panels for patient privacy

2.2-2.2.4.7

- ___ Medical psychiatric room
 check if not included in project
 (3) ___ meets patient room requirements
 (a) ___ single patient occupancy
 (b) ___ located to permit staff observation of room entrance
 (c) ___ designed to minimize potential for escape, concealment, injury, or suicide
 (d) ___ any observation arrangements provide patient privacy & minimize casual observation by visitors & other patients

Architectural Requirements

Building Systems Requirements

2.2-2.2.6 **SUPPORT AREAS FOR MEDICAL/SURGICAL NURSING UNITS**

- 2.2-2.2.5.3 Location:
 - (1) ___ support areas listed are located in or readily accessible* to each nursing unit
 - (3) ___ each support area provided on each nursing floor

2.1-2.6.1 ___ Administrative center or nurse station

- 2.1-2.6.1.1
 - (1) ___ space for counters
 - (2) ___ at least one handwashing station located in, next to, or directly accessible*

Nurse Call System:
___ Master station Table 2.1-2

- 2.1-2.6.2 ___ Documentation area
 - 2.1-2.6.2.1 ___ work surface to support documentation process for number of staff who will use it at same time

Nurse Call System:
___ Duty station Table 2.1-2

- 2.2-2.2.6.3 ___ Nurse or supervisor office
 - ___ in or readily accessible* to nursing unit

- 2.1-2.6.4 ___ Multipurpose room
 - 2.1-2.6.4.1 ___ at least one multipurpose room for each facility for staff, patients & patients' families for patient conferences, reports, education, training sessions & consultation

- 2.1-2.6.4.2 ___ accessible to each nursing unit (may serve several nursing units)

2.1-2.6.6 ___ Medication safety zones

- 2.1-2.6.6.1
 - (2) ___ medication preparation room
 - or
 - ___ self-contained medication dispensing unit

- (a) ___ located out of circulation paths to minimize distraction & interruption
- (c) ___ work counters
- (d) ___ task lighting
- (e) ___ meet acoustic design criteria per 1.2-5.1

- 2.1-2.6.6.2
 - (1) ___ medication preparation room
 - check if not included in project

Ventilation:
___ Min. 4 air changes per hour Table 7.1
Nurse Call System:
___ Duty station Table 2.1-2

- (a) ___ under visual control of nursing staff
- (b) ___ work counter
- ___ handwashing station
- ___ lockable refrigerator
- ___ locked storage for controlled drugs

- (c) Sharps Containers:
 - check if not included in project
 - ___ sharps containers placed at height that allows users to see top of container

- (d) ___ space to prepare medicines in addition to any self-contained medicine-dispensing unit

Architectural Requirements

Building Systems Requirements

- (2) self-contained medication dispensing units
 - check if not included in project
- (a) located at nurse station, in clean workroom, in an alcove, or inpatient room
 - lockable unit to secure controlled drugs
- (b) handwashing station located next to stationary medication-dispensing units
 - Mobile Medication-Dispensing Carts:
 - check if not included in project:
 - space in patient rooms to accommodate cart

2.1-2.6.7 Nourishment area or room

2.1-2.6.7.2

- (1) handwashing station
- (2) work counter
- (3) refrigerator
- (4) microwave
- (5) storage cabinets
- (6) space for temporary storage of unused & soiled food service implements

2.1-2.6.7.3 provisions & space for separate temporary storage of unused & soiled meal trays not picked up at mealtime

2.1-2.6.8 Ice-making equipment

2.1-2.6.8.1 located in an enclosed space

2.1-2.6.8.2

- (1) self-dispensing ice-making equipment in public area
- (2) check if not located in public area

2.1-2.6.9 Clean workroom or clean supply room

2.1-2.6.9.1

- clean workroom used for preparing patient care items
 - (1) work counter
 - (2) handwashing station
 - (3) storage facilities for clean & sterile supplies

or

2.1-2.6.9.2 clean supply room used only for storage & holding as part of system for distribution of clean & sterile supplies

2.1-2.6.10 Soiled workroom or soiled holding room

Ventilation:

Min. 2 air changes per hour Table 7.1

Nurse Call System:

Duty station Table 2.1-2

Ventilation:

Min. 4 air changes per hour Table 7.1

Positive pressure

Nurse Call System:

Duty station

Ventilation:

Min. 4 air changes per hour Table 7.1

Positive pressure

Architectural Requirements

- 2.1-2.6.10.1
 - (1) soiled workroom
 - (2) handwashing station
 - (3) flushing-rim clinical service sink with bedpan washer
 - (4) work counter
 - (4) space for separate covered containers
- or**
- 2.1-2.6.10.2
 - (1) soiled holding room
 - (a) handwashing station or hand sanitation station
 - (b) space for separate covered containers
 - (3) toilet with bedpan washer located in each inpatient toilet room
- 2.1-2.6.11.1
 - (1) Clean linen storage
 - clean linen stored in clean workroom or clean linen closet
 - (2) covered cart distribution system (corridor alcoves may be used)
 - check if not included in project
- 2.1-2.6.11.2 Equipment & supply storage room or alcove
 - min. 10 sf per patient bed
- 2.1-2.6.11.3 Storage space for stretchers & wheelchairs
- 2.1-2.6.11.4
 - (1) Emergency equipment storage
 - each nursing unit has at least one emergency equipment storage location
 - (2) under visual observation of staff
 - (3) storage locations in corridors do not infringe on min. required corridor width
- 2.1-2.6.12 Environmental services room
- 2.1-2.6.12.1
 - (1) serves one or more than one nursing unit on a floor
 - (2) readily accessible* to unit it serves
- 2.1-2.6.12.2
 - (1) service sink or floor-mounted mop sink
 - (2) provisions for storage of supplies & housekeeping equipment
 - (3) handwashing station or hand sanitation station
- 2.2-2.2.6.13
 - Examination room
 - check if not included in project (only if all patient rooms in nursing unit are single bedrooms)
 - (1) centrally located to serve one or more nursing units on same floor
 - (2) centrally located to serve one or more nursing units on same floor

Building Systems Requirements

- Ventilation:
- Min. 10 air changes per hour Table 7.1
 - Exhaust
 - Negative pressure
- Nurse Call System:
- Duty station
-
- Ventilation:
- Min. 10 air changes per hour Table 7.1
 - Exhaust
 - Negative pressure

Architectural Requirements

- 2.1-3.2.2 single-bed examination room
- 2.1-3.2.2.1 Space Requirements:
 - (1) min. clear floor area of 120 sf with min. clear dimension of 10'-0"
 - (2) room size permits min. clearance of 3'-0" at each side & at foot of exam table
 - (a) room arrangement permits placement of exam table, recliner, or chair at an angle, closer to one wall than another, or against wall to accommodate type of patient being served
 - (b) room arrangement permits placement of exam table, recliner, or chair at an angle, closer to one wall than another, or against wall to accommodate type of patient being served
- 2.1-3.2.2.2 Room Features:
 - (1) examination light
 - (2) storage for supplies
 - (3) accommodations for written or electronic documentation
 - (4) space for visitor's chair
 - (5) handwashing station

Building Systems Requirements

- Ventilation:
 - Min. 6 air changes per hour Table 7.1
- Power:
 - Min. 8 receptacles in room Table 2.1-1
 - Min. 4 receptacles convenient to head of stretcher
- Nurse Call System:
 - Emergency staff assistance station Table 2.1-2
 - Duty station
- Medical Gases:
 - 1 OX, 1 VAC Table 2.1-4

2.2-2.2.7 **SUPPORT AREAS FOR STAFF**

- 2.2-2.2.5.3 Location:
 - (1) support areas listed are located in or readily accessible* to each nursing unit
 - (3) each support area provided on each nursing floor

- 2.1-2.7.1 Staff lounge
 - min. 100 sf
- Nurse Call System: Table 2.1-2
- Duty station

- 2.1-2.7.2 Staff toilet room
 - 2.1-2.7.2.1 readily accessible* to each nursing unit
 - 2.1-2.7.2.2 toilet & handwashing station
- Ventilation: Table 7.1
- Min. 10 air changes per hour
 - Exhaust

- 2.1-2.7.3 Staff storage facilities
 - 2.1-2.7.3.1 securable closets or cabinet compartments for personal articles of staff
 - located in or near nurse station
 - 2.1-2.7.3.2 coat storage
 - check if not included in project:
 - storage of coats in closets or cabinets on each floor or in central staff locker area

Architectural Requirements

Building Systems Requirements

2.2-2.2.8 **SUPPORT AREAS FOR PATIENTS, FAMILIES & VISITORS**

- 2.2-2.2.5.3 Location:
 - (1) ___ support areas listed are located in or readily accessible* to each nursing unit
 - (3) ___ each support area provided on each nursing floor
- 2.2-2.2.8.1 ___ Family & visitor lounge
 - (2) ___ lounge immediately accessible* to nursing unit served (may serve more than one nursing unit)
 - (4) ___ lounge designed to minimize impact of noise & activity on patient rooms & staff functions
 - (6) ___ public communication services
- 2.2-2.2.8.2 ___ toilet room readily accessible*
- 2.2-2.2.8.3 ___ Place for meditation & prayer
 - ___ dedicated quiet space to support meditation, bereavement, or prayer.

Architectural Details & MEP Requirements

2.1-7.2.2 ARCHITECTURAL DETAILS

- 2.1-7.2.2.1 CORRIDOR WIDTH:
 - NFPA 101 ___ Aisles, corridors & ramps required for exit access in a hospital not less than 8'-0" in clear & unobstructed width
 - or**
 - ___ Code Review Sheet establishing compliance with NFPA 101 has been submitted
 - ___ Aisles, corridors & ramps in adjunct areas not intended for the housing, treatment, or use of inpatients not less than 44" in clear width
- 2.1-7.2.2.2 CEILING HEIGHT:
 - (1) ___ Min. ceiling height 7'-6" in corridors & normally unoccupied spaces
 - (4) ___ Min. height 7'-6" above floor of suspended tracks, rails & pipes located in traffic path for patients in beds and/or on stretchers
 - ___ Min. ceiling height 7'-10" in other areas

2.1-7.2.2.3 DOORS & DOOR HARDWARE:

- (1)
 - (a) ___ Doors between corridors, rooms, or spaces subject to occupancy swing type or sliding doors
 - ___ Sliding doors
 - check if not included in project
 - ___ manual or automatic sliding doors comply with NFPA 101
 - ___ code review sheet attached
 - ___ no floor tracks
 - (b) ___ Min. 45.5" clear door width for patient rooms & diagnostic/treatment areas
 - ___ Min. 83.5" clear door height for patient rooms & diagnostic/treatment areas
- (2)
 - (b) ___ Swinging doors for personnel use in addition to sliding doors
 - check if not included in project
 - ___ min. clear width 34.5"
 - (3) ___ Doors do not swing into corridors (except doors to non-occupiable spaces & doors with emergency breakaway hardware)
- (4)
 - (b) ___ Lever hardware
- (5) ___ Doors for patient bathing/toilet facilities

- (a) 2 doors separated by horizontal distance equal to one-half length of max. diagonal room dimension
 - or**
 - door that swings outward
 - or**
 - door equipped with emergency rescue hardware
 - or**
- (b) sliding door
 - toilet room door opening in public area or corridor maintains visual privacy
 - bathing room door opening in corridor maintains visual privacy
- 2.1-7.2.2.5 **WINDOWS IN PATIENT ROOMS:**
 - (1) Natural light by means of window to outside
 - (3) Min. net glazed area no less than 8% of floor area of room served
 - (a) Operable windows
 - check if not included in project
 - operation limited with either stop limit/restrictor hardware or open guard/screen
- 2.1-7.2.2.6 insect screens
- 2.1-7.2.2.7 **GLAZING MATERIALS:**
 - (2) Safety glass-tempered or plastic glazing materials used for shower doors & bath enclosures
 - check if not included in project
 - (4) Glazing within 18" of floor
 - check if not included in project
 - safety glass, wire glass or plastic break-resistant material
- 2.1-7.2.2.8 **HANDWASHING STATIONS:**
 - (1) Handw. stations in patient care areas located to be visible & unobstructed
 - (3) anchoring suitable for vertical or horizontal force of 250 lbs.
 - (4) Handwashing Station Countertops:
 - check if not included in project
 - (a) porcelain, stainless steel or solid surface materials
 - (b) plastic laminate countertops
 - check if not included in project
 - substrate marine-grade plywood (or equivalent) with impervious seal
 - (5) Designed to prevent storage beneath sink
 - (6) Provisions for drying hands
 - (a) hand-drying device does not re-

- (d) require hands to contact dispenser
- (7) directly accessible* to sinks
- 2.1-7.2.2.9 **GRAB BARS:**
 - (2) Liquid or foam soap dispensers
 - Grab bars anchored to sustain concentrated load of 250 lbs.
- 2.1-7.2.2.10 **HANDRAILS:**
 - (1) Handrails installed on both sides of patient use corridors
 - (3) Rail ends return to wall or floor
 - (4) Smooth non-textured surface free of rough edges
 - (5) Eased edges & corners
 - (6) Finishes cleanable
- 2.1-7.2.2.12 **NOISE CONTROL:**
 - (1) Recreation rooms, exercise rooms, equipment rooms & similar spaces with potential impact noises are not located directly over patient bed areas
 - (2) Partitions, floors & ceiling construction in patient areas conform to Table 1.2-6
- 2.1-7.2.3 SURFACES**
- 2.1-7.2.3.1 **FLOORING & WALL BASES:**
 - (1) Selected flooring surfaces cleanable & wear-resistant for location
 - (2) Smooth transitions between different flooring materials
 - (3) Flooring surfaces, including those on stairways, stable, firm & slip-resistant
 - (b) Carpet
 - check if not included in project
 - provides stable & firm surface
 - (4) Floors & wall bases of soiled workrooms, toilet rooms & other wet cleaned areas are not physically affected by cleaning solutions
- 2.1-7.2.3.2 **WALLS & WALL PROTECTION:**
 - (1) Washable wall finishes
 - (a) Wall finishes near plumbing fixtures smooth, scrubbable & water-resistant
 - (b) Monolithic wall surfaces in areas routinely subjected to wet spray or splatter
- 2.1-7.2.3.3 **CEILINGS:**
 - (1) Ceilings in areas occupied by patients, & in clean rooms & soiled rooms:
 - cleanable with routine housekeeping equipment
 - acoustic & lay-in ceilings
 - check if not included in project
 - do not create ledges or crevices

2.1-8.2 **HEATING, VENTILATION, & AIR-CONDITIONING (HVAC) SYSTEMS**

- 4/6.3.1 Outdoor Air Intakes:
 - 4/6.3.1.1 Located min. 25 feet from cooling towers & all exhaust & vent discharges
 - Bottom of air intake is at least 6'-0" above grade
 - 4/6.3.1.2 Roof Mounted Air Intakes:
 - check if not included in project
 - bottom min. 3'-0" above roof level
- 4/6.3.2 Exhaust Discharges for Infectious Exhaust Air:
 - check if not included in project
 - Ductwork under negative pressure (except in mechanical room)
 - Discharge in vertical direction at least 10'-0" above roof level
 - Located not less than 10'-0" horizontally from air intakes & operable windows/doors
- 4/6.4 Filtration:
 - 4/6.4.1 Filter banks conform to Table 6.4
 - 4/6.4.1 Filter Bank #1 placed upstream of heating & cooling coils
 - 4/6.4.2 Filter Bank No. 2 installed downstream of cooling coils & supply fan
- 4/6.5 Heating & Cooling Systems:
 - 4/6.5.3 no radiators or convectors in special care areas
- 4/6.7 Air Distribution Systems:
 - 4/6.7.1 Ducted return or exhaust systems in spaces listed in Table 7.1 with required pressure relationships
 - Ducted return or exhaust systems in inpatient care areas
 - 4/6.7.3 Smoke & Fire barriers:
 - HVAC zones coordinated with compartmentation to minimize ductwork penetrations of fire & smoke barriers
- 4/6.8 Energy Recovery Systems:
 - 4/6.8.2 Exhaust systems serving potentially contaminated rooms are not used for energy recovery
- 4/6.9 Duct Lining:
 - No duct lining in ductwork located downstream of Filter Bank #2
- 4/7. Space Ventilation:
 - 4/7.1 Spaces ventilated per Table 7.1
 - Air movement from clean areas to less clean areas

- Min. number of total air changes indicated either supplied for positive pressure rooms or exhausted for negative pressure rooms
- Recirculating room HVAC units
 - check if not included in project
 - each unit serves only single space
 - min. MERV 6 filter for airflow downstream of cooling coils
- 2.1-8.2.1.1 Acoustic Considerations:
 - (5) Equipment location or acoustic provisions limit noise associated with outdoor mechanical equipment to 65 dBA at building façade
- 2.1-8.2.1.2 Ventilation & Space-Conditioning:
 - (1) All rooms & areas used for patient care have provisions for ventilation
 - (2) Natural ventilation only provided in non-sensitive areas & patient rooms via operable windows
 - check if not included in project
 - Mechanical ventilation provided for all rooms & areas in facility in accordance with Table 7.1 of Part 4

2.1-8.3 **ELECTRICAL SYSTEMS**

2.1-8.3.2 **ELECTRICAL DISTRIBUTION & TRANSMISSION**

- 2.1-8.3.2.1 Switchboards Locations:
 - (1)
 - (a) Located in areas separate from piping & plumbing equipment
 - (b) Not located in rooms they support
 - (c) Accessible to authorized persons only
 - Located in dry, ventilated space free of corrosive gases or flammable material
- 2.1-8.3.2.2 Panelboards:
 - (1) Panelboards serving life safety branch emergency circuits only serve same floor, floor above & floor below
 - (2) Panelboards serving critical branch emerg. circuits only serve same floor
 - (3) New panelboards not located in exit enclosures
- 2.1-8.3.3.1 **EMERGENCY ELECTRICAL SERVICE**
 - (1) Emergency power per NFPA 99, NFPA 101 & NFPA 110
- 2.1-8.3.4 **LIGHTING**
 - 2.1-8.3.4.2 Light fixtures in wet areas have smooth, cleanable, shatter-resistant lenses & no exposed lamps

2.1-8.3.4.3

- (1) Patient Rooms:
 - general lighting
- (a)
 - reading light for each patient
 - controls accessible to patient in bed
 - light source covered by diffuser or lens
 - flexible light arms
 - check if not included in project
 - designed to prevent lamp from contacting bed linen
 - night lighting
- (b)
 - switch in patient room
 - lights path from room entrance to bed
 - lights path from bed to toilet

- (2) Nursing Unit Corridors:
 - general illumination with reduced light levels at night
- (3) Exam/Treatment Rooms:
 - portable or fixed exam light

2.1-8.3.5 **ELECTRICAL EQUIPMENT**

- 2.1-8.3.5.2 Required handwashing station or scrub sink tied to building electrical service
 - check if not included in project
 - connected to essential electrical system

2.1-8.3.6 **ELECTRICAL RECEPTACLES**

- 2.1-8.3.6.1 Receptacles in Corridors:
 - (1)
 - duplex grounded receptacles installed approx. 50'-0" apart
 - duplex grounded receptacles installed approx. within 25'-0" of corridor ends
- 2.1-8.3.6.2 Receptacles in Patient Care Areas:
 - receptacles provided according to Table 2.1-1
- 2.1-8.3.6.3 Emergency System Receptacles:
 - distinctively colored or marked for identification

2.1-8.3.7 **CALL SYSTEMS**

- Nurse call equipment legend includes patient stations, bath stations, staff emergency stations & code call stations
- 2.1-8.3.7.1 (1) Nurse call system locations provided as required in Table 2.1-2
- (2) Nurse call systems report to attended location with electronically supervised visual & audible signals
- (4) Call systems meet requirements of UL 1069 *Standard for Hospital*

Signaling & Nurse Call Equipment

- (5) Wireless system
 - check if not included in project
 - meet requirements of UL 1069

2.1-8.3.7.2 Patient Call Stations:

- (1) each patient sleeping bed provided with patient call station equipped for two-way voice communication
- (2) visible signal once call station has been activated
- (a) reset switch for canceling call
- (b) visible signal in corridor at patient room door
- (3) additional visible signals installed at corridor intersections
- (a) visible & audible signal at nurse call duty stations in clean workroom, soiled workroom, medication preparation room, documentation area or other charting facilities, nourishment area, nurse master station of nursing unit or patient care area
- (b) call stations in diagnostic & treatment areas per Table 2.1-2

2.1-8.3.7.3 Bath Stations:

- provided at each patient toilet, bathtub or shower stall
- (1) alarm turned off only at bath station where it was initiated
- (2) located 5'-0" to 6'-0" above floor in shower stalls & tubs, within normal view of user
- within reach of staff without need to step into shower or tub
- (3) located to side of toilets within 12" of front of toilet bowl & 3'-0" to 4'-0" above floor
- accessible to both toilet & shower

- 2.1-8.3.7.4 Staff emergency stations for summoning local staff assistance for non-life-threatening situations at each patient care location

- 2.1-8.3.7.5 Code call station equipped with continuous audible or visual signal at point of origin

2.1-8.4.2 **PLUMBING & OTHER PIPING SYSTEMS**

2.1-8.4.2.5 Heated Potable Water Distribution Systems:
(2) ___ systems serving patient care areas are under constant recirculation

___ non-recirculated fixture branch piping does not exceed 25'-0" in length

(3) ___ no dead-end piping

(4) ___ water-heating system has supply capacity at minimum temperatures & amounts indicated in Table 2.1-3

(5) ___ handwashing stations supplied as required above

or

___ handwashing stations supplied at constant temperature between 70°F & 80°F using single-pipe supply

2.1-8.4.2.6 Drainage Systems:

(1) ___ drainage piping above ceiling of, or exposed in electric closets

check if not included in project

___ special provisions to protect space below from leakage & condensation

2.1-8.4.3 **PLUMBING FIXTURES**

2.1-8.4.3.1 (1) ___ Materials material used for plumbing fixtures non-absorptive & acid resistant

2.1-8.4.3.2 Handwashing Station Sinks:
(1) ___ basins reduce risk of splashing to areas where direct patient care is provided, sterile procedures are performed & medications are prepared

(2) ___ basin min. 144 square inches

___ min. dimension 9 inches

(3) ___ made of porcelain, stainless steel, or solid-surface materials

(5) ___ water discharge point of faucets at least 10 inches above bottom of basin

(7) ___ anchoring for sinks withstands min. vertical or horizontal force of 250 lbs.

(8) ___ fittings operated without using hands for sinks used by medical & nursing staff, patients & public

(a) ___ blade handles or single lever
___ min. 4 inches long
___ provide clearance required for operation

or

(b) ___ sensor-regulated water fixtures
___ meet user need for temperature & length of time water flows
___ designed to function at all times & during loss of normal power

2.1-8.4.3.3 Showers & Tubs:
 check if not included in project

(1) ___ nonslip walking surfaces

2.1-8.4.3.4 Ice-Making Equipment:
___ copper tubing provided for supply connections

2.1-8.4.3.5 Clinical Sinks:
(1) ___ trimmed with valves that can be operated without hands
(2) ___ handles min. 6 inches long
___ integral trap wherein upper portion of water trap provides visible seal

2.1-8.4.3.7 Bedpan Washers:
(1) ___ bedpan washer provided in each inpatient toilet room

2.1-8.4.4 **MEDICAL GAS & VACUUM SYSTEMS**
___ Station outlets provided as indicated in Table 2.1-4

2.1-8.4.4.2 (2) ___ Vacuum discharge at least 25'-0" from all outside air intakes, doors & operable windows

2.1-8.6.2 **ELECTRONIC SURVEILLANCE SYSTEMS**
 check if not included in project
2.1-8.6.2.1 ___ Devices in patient areas mounted in unobtrusive & tamper-resistant enclosures

2.1-8.6.2.2 ___ Monitoring devices not readily observable by general public or patients

2.1-8.6.2.3 ___ Receive power from emergency electrical system