

COMPLIANCE CHECKLIST**IP14 Surgical Services**

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 2018 Edition of the FGI Guidelines for Design and Construction of Hospitals. 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 (2012) and applicable related standards contained in the appendices of the Code
- State Building Code (780 CMR)
- Accreditation requirements of The Joint Commission
- CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities
- USP 797 & Regulations of the Massachusetts Board of Registration in Pharmacy
- Occupational Safety & Health Standards (OSHA)
- 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 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 marks, unless otherwise directed in the checklist. If a functional space is not affected by a renovation project, the mark "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. "E" must not be used for an existing required support space associated with a new patient care room or area.

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). An explicit floor plan or plan detail must be attached to 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, waste anesthesia gas disposal and instrument air outlets (if required) are identified respectively by the abbreviations "OX", "VAC", "MA", "WAGD" & "IA".
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 and reproduced in this checklist.

Facility Name:

DoN Project Number: (if applicable)

Facility Address:

Satellite Name: (if applicable)

Building/Floor Location:

Satellite Address: (if applicable)

Submission Dates:

Project Description:

Initial Date:

Revision Date:

Architectural Requirements**Building Systems Requirements****2.2-3.3****Surgical Services****2.2-3.3.1.1**

(4)

Location & Layout:

___ surgery department divided into unrestricted areas, semi-restricted areas & restricted areas

(1)

___ semi-restricted & restricted areas of surgery department located & arranged to prevent unrelated traffic

(2)

___ clinical practice setting designed to facilitate movement of patients & personnel into through & out of defined areas in surgery department

(3)

___ signs that clearly indicate need for surgical attire shown on plans at all entrances to semi-restricted areas

2.2-3.3.2**PROCEDURE ROOMS**

☐ check if not included in project

2.2-3.3.2.1(1)

(a)

Application:

___ room designated for the performance of patient care that requires high-level disinfection or sterile instruments & some environmental controls but not required to be performed with the environmental controls of an operating room

___ hospital has completed clinical assessment of procedures to be performed to determine appropriate room type & location for procedures & documented this in functional program included in Project Narrative

2.2-3.3.2.1(2)

(a)

Location:

___ procedure room meet requirements of semi-restricted area

(b)

___ procedure room accessed from semi-restricted corridor or from unrestricted corridor

2.2-3.3.2.2**Space Requirements:**

(1)(a)

___ min. clear floor area 130 sf

(1)(b)

___ anesthesia machine & associated supply carts are used

☐ check if not included in project

(1)(c)

___ min. clear floor area 160 sf
___ procedure room sized to accommodate personnel & equipment needed for particular procedures,

___ procedure room sized to accommodate additional personnel & equipment that may be needed for emergency rescue

(2)(a)

___ min. clearance 3'-6" on each side of table, gurney or procedural chair
___ min. clearance 3'-0" at head & foot of table, gurney or procedural chair

Ventilation:

___ Min. 15 air changes per hour Table 7.1

___ Positive pressure

___ No recirculating room units

Power:

___ Min. 12 receptacles in total Table 2.1-1

___ Min. 8 receptacles convenient to table placement with at least one on each wall

Nurse Call System:

___ Staff assistance station Table 2.1-2

___ Emergency call station

Medical Gases:

___ 1 OX, 2 VAC, 1 MA Table 2.1-3

Architectural Requirements

- (2)(b) ☐ anesthesia machine & associated supply carts are used
☐ min. clearance 6'-0" at head of table, gurney or procedural chair
- 2.2-3.3.2.3 ☐ Documentation area
 (1) ☐ accommodations for written and/or electronic documentation provided in procedure room
- 2.1-2.8.3.1 ☐ work surface to support documentation process
- 2.2-3.3.2.3(2) ☐ use of documentation area allows for direct observation of patient
- 2.2-3.3.2.4 ☐ Provisions made for patient privacy
- 2.2-3.3.2.5 ☐ Handwashing Facilities:
 (1) ☐ handwashing station located in procedure room
or
 (2) ☐ hand scrub station directly accessible* to procedure room

OPERATING ROOMS

- 2.2-3.3.3 Application: Rooms designated for invasive procedures as defined in Glossary
 2.2-3.3.3.1(1) ☐ procedures performed in aseptic surgical field & penetrates protective surfaces of patient body, may require entry into or opening of sterile body cavity, or involve insertion of indwelling foreign body, or include excision & grafting of burns
☐ procedures that do not begin as invasive procedures but have recognized measurable risks of requiring conversion to invasive procedures
- (2) ☐ Operating room meets requirements of restricted area
- 2.2-3.3.3.2 ☐ General Operating Room
☐ check if not included in project
 Space Requirements:
 (3) (may include minor wall encroachments max. 12" deep by max. 10% of wall length)
 (1)(a) ☐ min. clear floor area 400 sf
 (1)(b) ☐ min. clearance 8'-6" on each side of operating table
☐ min. clearance 6'-0" at head of operating table
☐ anesthesia work zone with clear floor area 6'-0" x 8'-0"
☐ min. clearance 7'-0" at foot of operating table

Building Systems Requirements

Ventilation:		
<input type="checkbox"/> Min. 20 air changes per hour	Table 7.1	
<input type="checkbox"/> Positive pressure		
<input type="checkbox"/> No recirculating room units		
Lighting:		
<input type="checkbox"/> General lighting in addition to special lighting units provided at surgical table	2.1-8.3.4.3(4)(a)	
Power:		
<input type="checkbox"/> Min. 36 receptacles in total	Table 2.1-1	
<input type="checkbox"/> Min. 16 receptacles convenient to table placement		
<input type="checkbox"/> Min. 2 on each wall		
Nurse Call System:		
<input type="checkbox"/> Staff assistance station	Table 2.1-2	
<input type="checkbox"/> Emergency call station		
Medical Gases:		
<input type="checkbox"/> 2 OX, 5 VAC, 1 MA, 1 WAGD	Table 2.1-3 + Errata	

Architectural Requirements**Building Systems Requirements**

- 2.2-3.3.3.3 _____ Documentation area
- (1) _____ accommodations for written and/or electronic documentation
- (2) _____ use of documentation area allows for direct observation of patient
- 2.2-3.3.3.4 _____ Medical image viewers (e.g. X-ray film or digital)
- 2.2-3.3.3.5(3) Communications System:
- (a) _____ all operating rooms are equipped with emergency communication system that incorporates push activation of emergency call switch
- (b) _____ each operating room have system for emergency communication with surgery department control station
- (2) _____ Operating room for image-guided surgery
☐ check if not included in project
- (3) Space Requirements:
 (may include minor wall encroachments of max. 12" deep by max. 10% of wall length)
 _____ uses portable imaging equipment or surgical procedures that require additional personnel and/or large equipment
- (a) _____ sized to accommodate personnel & equipment planned to be in room during procedures
- New Construction & Major Renovations:
 _____ min. clear floor area 600 sf
 _____ min. clear dimension 20'-0"
or
- (b) Limited Renovations:
 _____ min. clear floor area 500 sf
 _____ min. clear dimension 20'-0"

Ventilation:	
_____ Min. 20 air changes per hour	
_____ Positive pressure	Table 7.1
_____ No recirculating room units	
Lighting:	
_____ General lighting in addition to special lighting units provided at surgical table	2.1-8.3.4.3(4) (a)
Power:	
_____ Min. 36 receptacles in total	Table 2.1-1
_____ Min. 16 receptacles convenient to table placement	
_____ Min. 2 on each wall	
Nurse Call System:	
_____ Staff assistance station	Table 2.1-2
_____ Emergency call station	
Medical Gases:	
_____ 2 OX, 5 VAC, 1 MA, 1 WAGD	Table 2.1-3 + Errata

- 2.2-3.3.3.3 _____ Documentation area
- (1) _____ accommodations for written and/or electronic documentation
- (2) _____ use of documentation area allows for direct observation of patient
- 2.2-3.3.3.4 _____ Medical image viewers (e.g. X-ray film or digital)
- 2.2-3.3.3.5(3) Communications System:
- (a) _____ all operating rooms are equipped with emergency communication system that incorporates push activation of emergency call switch

Architectural Requirements**Building Systems Requirements**

- (b) _____ each operating room have system for emergency communication with surgery department control station

- 2.2-3.3.3.6 _____ Equipment storage rooms for open-heart or complex orthopedic & neurosurgical surgery
_____ provided in semi-restricted area

2.2-3.3.4 **HYBRID OPERATING ROOM**

- ☐ check if not included in project

- 2.2-3.3.4.1 Application:
_____ hybrid operating rooms (Class 3 imaging rooms)
- 2.2-3.3.4.2 Space Requirements:
2.2-3.3.3.2 (may include minor wall encroachments max. 12" deep by max. 10% of wall length)
- (3) _____ min. clear floor area 400 sf
- (1)(a) _____ min. clearance 8'-6" on each side of operating table
- (1)(b) _____ min. clearance 6'-0" at head of operating table
- _____ anesthesia work zone with clear floor area 6'-0" x 8'-0"
- _____ min. clearance 7'-0" at foot of operating table
- 2.2-3.3.4.2(1) _____ clear floor area, clearance & storage requirements for imaging equipment contained in room
- 2.2-3.3.4.2(2) _____ any mobile storage units do not encroach on required clear floor area & clearances
- 2.2-3.4.2.2(1) _____ imaging rooms are sized & configured to comply with manufacturer's recommendations for installation service & maintenance
_____ installation plans from manufacturer have been submitted to DPH Plan Review
- 2.2-3.3.3.3 _____ Documentation area
- (1) _____ accommodations for written and/or electronic documentation
- (2) _____ use of documentation area allows for direct observation of patient
- 2.2-3.3.3.4 _____ Medical image viewers (e.g. X-ray film or digital)
- 2.2-3.3.3.5(3) Communications System:
- (a) _____ all operating rooms are equipped with emergency communication system that incorporates push activation of emergency call switch

Ventilation:	
_____ Min. 20 air changes per hour	Table 7.1
_____ Positive pressure	
_____ No recirculating room units	
Lighting:	
_____ General lighting in addition to special lighting units provided at surgical table	2.1-8.3.4.3(4) (a)
Power:	
_____ Min. 36 receptacles in total	Table 2.1-1
_____ Min. 16 receptacles convenient to table placement	
_____ Min. 2 on each wall	
Nurse Call System:	
_____ Staff assistance station	Table 2.1-2
_____ Emergency call station	
Medical Gases:	
_____ 2 OX, 5 VAC, 1 MA, 1 WAGD	Table 2.1-3 + Errata

Architectural Requirements**Building Systems Requirements**

- (b) ☐ each operating room have system for emergency communication with surgery department control station

2.2-3.3.4.3 ☐ Control room

- (1) ☐ sized & configured in compliance with manufacturer recommendations for installation service & maintenance
- (2) ☐ control room physically separated from hybrid operating room with walls & door
- or**
- ☐ open control area serves only one operating room & is built maintained & controlled same as operating room

- (4) ☐ view panels that provide for view of patient & surgical team

2.2-3.3.4.4 Structural Support:

- ☐ floor & ceiling structures designed to support weight of imaging equipt as well as other fixed ancillary equipt & movable ancillary equipt

- 2.2-3.3.4.5 ☐ Hybrid operating room protected from disruptive environmental vibrations & other disturbances in accordance with imaging equipt manufacturer's technical specifications

2.2-3.3.4.6 ☐ System component room

2.2-3.4.2.5(1) Location:

- (a) ☐ accessed only from unrestricted or semi-restricted space outside imaging room

2.2-3.4.2.5(2) Space Requirements:

- ☐ room sized to accommodate following as indicated by imaging equipment manufacturer
- (a) ☐ transformers
- (b) ☐ power distribution equipment
- (c) ☐ power conditioning/UPS equipment
- (d) ☐ computers
- (e) ☐ associated electronics & electrical gear

2.2-3.3.4.7 Radiation Protection:

- 2.2-3.4.1.3 ☐ check if not included in project (only if imaging equipment does not emit ionizing radiations)
- ☐ certified radiation physicist has specified type, location & amount of radiation protection
- ☐ specifications of radiation shielding have been submitted to DPH Radiation Control Program

Architectural Requirements**Building Systems Requirements**

- 2.2-3.3.4.8 Specific requirements for hybrid operating rooms with intraoperative computerized tomography (CT) systems:
☐ check if not included in project
- 2.2-3.3.4.8(1)
 2.2-3.4.1.3(1)
 (a) _____ Shielded control room
 Space Requirements:
 _____ sized & configured according to manufacturer recommendations
 (c) _____ shielded view window
 designed to provide full view of patient at all times (use of additional closed-circuit video monitoring permitted)
 (d) _____ control room enclosed with walls & door
- 2.2-3.3.4.8(2) Specific Requirements for Hybrid Operating Rooms with Intraoperative MRI Systems:
☐ check if not included in project
- 2.2-3.4.5.1
 (1) _____ Planning Configuration of MRI Suite:
 _____ conforms to 4-zone screening & access control protocols identified by American College of Radiology
 _____ **Zone I:** all areas that are freely accessible to the general public
 _____ **Zone II:** interface between the publicly accessible uncontrolled Zone I & strictly controlled Zone III (space for screening questions, patient histories, medical insurance questions)
 _____ **Zone III:** no free access by unscreened persons or non-MRI personnel due to interactions between persons or equipment & MRI scanner
 _____ **Zone IV:** MRI scanner room where access must be supervised by MRI personnel
- (2) _____ MRI suite as well as spaces around, above & below designed to prevent unscreened individuals from entering 5-gauss volume around MRI equipment
- (3) _____ Specific Support Areas for MRI Suite:
 (a) _____ space for patient interviews & clinical screening
 (b) _____ space for physical screening
 (c) _____ ferromagnetic (only) detection & warning systems
 (d) _____ access controls

Architectural Requirements**Building Systems Requirements**

- (e) _____ space to accommodate site-specific clinical & operational requirements such as image-guided procedures emergent imaging or general anesthesia support
☐ check if not included in project
- (f) _____ space for containment of non-MRI-safe objects outside restricted MRI safety zones
- (g) _____ space for storage (patient lockers) of patient belongings & non-MRI-safe items
- (4) _____ any area in which magnetic field strength is equal to or greater than 5 gauss is physically restricted by use of key locks or pass-key locking systems

- 2.2-3.4.5.4 (1) _____ MRI control room
 _____ operator console positioned so operator has full view of principal approach & entrance to MRI scanner room
- (2) _____ outward-swinging door
☐ check if not included in project
 _____ door in open position does not obstruct view of entry opening from operator's console
- 2.2-3.4.1.3(1) (a) _____ Space Requirements:
 _____ sized & configured according to manufacturer's recommendations
- 2.2-3.4.1.3(1) (c) _____ shielded view window designed to provide full view of examination/ procedure table & patient at all times including full view of patient during imaging activities (use of additional closed-circuit video monitoring permitted)
- 2.2-3.4.1.3(1) (d) _____ control room enclosed with walls & door

- 2.2-3.4.5.9 Special Design Elements for MRI Scanner Room:
- (1)(a) _____ ferromagnetic materials that may become detached or otherwise interfere with operation of MRI scanner are not used in MRI scanner rooms
- (1)(b) _____ MRI scanner room be located and/or shielded to avoid electromagnetic interference from elevators or other electromagnetic equipment

Architectural Requirements**Building Systems Requirements**

- (2)(a) ☐ floor structure designed to support weight of MRI scanner equipment minimize disturbance to MRI magnetic field & mitigate disruptive environmental vibrations
- (2)(b) ☐ MRI rooms be marked with lighted sign with red light to indicate that magnet is always on
- (2)(c) ☐ acoustic control provided to mitigate noise emitted by MRI scanner per Table 1.2-6

2.2-3.3.4.8(3) **Specific Requirements for Hybrid Operating Rooms with Vascular Imaging Systems:**

☐ check if **not** included in project

- 2.2-3.4.1.3(1) ☐ Shielded control alcove or room
- (a) ☐ Space Requirements:
 - ☐ sized & configured according to manufacturer's recommendations
- (c) ☐ shielded view window designed to provide full view of examination/ procedure table & patient at all times including full view of patient during imaging activities (use of additional closed-circuit video monitoring permitted)
- (d) ☐ control room enclosed with walls & door

2.2-3.3.5 **PRE- & POSTOPERATIVE PATIENT CARE AREAS**

- 2.1-3.4.1.1 ☐ Patient care stations accommodate lounge chairs, gurneys or beds for pre- & post-procedure (recovery) patient care
- ☐ Patient care stations accommodate seating space for family/visitors
- 2.1-3.4.1.2 ☐ Location in unrestricted area
- 2.1-3.4.1.3(2) ☐ Layout:
 - (a) ☐ combination of pre- & post-procedure patient care stations in one area
 - ☐ patient care stations combined in same area meet most restrictive requirements of areas to be combined
 - or**
 - (b) ☐ separate pre-procedure patient care area & post-procedure recovery area
 - ☐ patient care stations combined in same area meet most restrictive requirements of areas to be combined
 - or**
 - (c) ☐ three areas: pre-procedure patient care area Phase I post-anesthetic care unit (PACU) & Phase II recovery area

Architectural Requirements**Building Systems Requirements**

- 2.1-3.4.1.4
(1) Number of Patient Care Stations:
 ___ pre- & post-procedure patient care stations are combined into one patient care area
☐ check if not included in project
 ___ at least two patient care stations for each operating room
- (2) ___ separate pre-procedure & recovery areas
☐ check if not included in project
- 2.1-3.4.3 ___ pre-procedure patient care room or area provides minimum of one patient care station per imaging room, procedure room or operating room
- 2.1-3.4.4 ___ Phase I post-anesthetic care unit (PACU) provides minimum of one Phase I patient care station per Class 3 imaging or operating room
- 2.1-3.4.5 ___ Phase II recovery room(s) or area
 ___ minimum of one Phase II patient care station per operating room
- 2.1-3.4.2.2
(2)(a) Space Requirements:
 ___ patient care bays
☐ check if not included in project
 ___ min. clearance 5'-0" between sides of patient beds/gurneys/lounge chairs
 ___ min. clearance 3'-0" between sides of patient beds/gurneys/lounge chairs & adjacent* walls or partitions
 ___ min. clearance 2'-0" between foot of patient beds/gurneys/lounge chairs & cubicle curtain
- (2)(b) ___ patient care cubicles
☐ check if not included in project
 ___ min. clearance 3'-0" between sides of patient beds/gurneys/lounge chairs & adjacent* walls or partitions
 ___ min. clearance 2'-0" between foot of patient beds/gurneys/lounge chairs & cubicle curtain
- Ventilation:
 ___ Min. 6 air changes per hour Table 7.1
 ___ No recirculating room units
- Power:
 ___ Min. 8 receptacles in total Table 2.1-1
 ___ convenient to head of gurney or bed
- Nurse Call System:
 ___ Staff assistance station Table 2.1-2
 ___ Emergency call station
- Medical Gases:
 ___ 1 OX, 3 VAC, 1 MA per station Table 2.1-3
- Ventilation:
 ___ Min. 6 air changes per hour Table 7.1
 ___ No recirculating room units
- Power:
 ___ Min. 8 receptacles in total Table 2.1-1
 ___ convenient to head of gurney or bed
- Nurse Call System:
 ___ Staff assistance station Table 2.1-2
 ___ Emergency call station
- Medical Gases:
 ___ 1 OX, 3 VAC, 1 MA per station Table 2.1-3

Architectural Requirements**Building Systems Requirements**

- ☐ bays or cubicles face each other
☐ check if not included in project
☐ aisle with min. clearance 8'-0" independent of foot clearance between patient stations or other fixed objects
- (2)(c) ☐ single-patient rooms
☐ check if not included in project
☐ min. clearance 3'-0" between sides & foot of beds/gurneys/lounge chairs & adjacent* walls or partitions
- 2.1-2.4.2 ☐ Airborne infection isolation (AII) room in pre-procedure & recovery areas
- 2.1-2.4.2.2 ☐ complies with requirements applicable to single-patient rooms
- (2) ☐ personal protective equipment (PPE) storage at entrance to room
- (3) ☐ handwashing station
- (4) ☐ patient toilet room
☐ serves only one AII room
- 2.1-2.4.2.3 ☐ anteroom
☐ check if not included in project
- (1) ☐ provides space for persons to don personal protective equipment (PPE) before entering patient room
- (2) ☐ all doors to anteroom have self-closing devices
or
☐ audible alarm activated when AII room is in use as isolation room
- (3)(a) ☐ handwashing station
- (3)(b) ☐ storage for unused PPE
- (3)(c) ☐ disposal/holding container for used PPE
- Ventilation:
☐ Min. 6 air changes per hour Table 7.1
☐ No recirculating room units
- Power:
☐ Min. 8 receptacles in total Table 2.1-1
☐ convenient to head of gurney or bed
- Nurse Call System:
☐ Staff assistance station Table 2.1-2
☐ Emergency call station
- Medical Gases:
☐ 1 OX, 3 VAC, 1 MA per station Table 2.1-3
- Ventilation:
☐ Min. 12 air changes per hour Table 7.1
☐ Exhaust
☐ Negative pressure
☐ No recirculating room units
- Ventilation:
☐ Min. 10 air changes per hour Table 7.1
☐ Exhaust
☐ No recirculating room units
- Ventilation:
☐ Min. 10 air changes per hour Table 7.1
☐ Exhaust
☐ No recirculating room units

Architectural Requirements**Building Systems Requirements**

- 2.1-2.4.2.4 (1)(a) Architectural Details & Furnishings:
 ___ perimeter walls ceiling & floor including penetrations constructed to prevent air exfiltration
- (1)(b) ___ self-closing devices on all room exit doors
or
 ___ activation of audible alarm when AII room is in use as isolation room
- 2.1-2.4.2.5 ___ edge seals provided along sides & top of doorframe for any door into AII room
 ___ room pressure visual or audible alarm
- 2.1-3.4.2.4 Patient Privacy:
 2.1-2.1.2 ___ provisions are made to address patient visual & speech privacy
- 2.1-3.4.2.5 ___ Handwashing stations
 2.1-2.8.7.1 ___ located in each room where hands-on patient care is provided
 2.1-2.8.7.3 ___ handwashing station serves multiple patient care stations
 ☐ check if not included in project
- (1) ___ at least 1 handwashing station for every 4 patient care stations or fewer & for each major fraction thereof
- (2) ___ handwashing stations evenly distributed
- 2.1-3.4.4.2 ___ At least one route of patient transport provides direct access from semi-restricted area of surgical suite to Phase I recovery area without crossing public corridors
- 2.1-3.4.4.3 ___ Design of Phase I recovery area provides observation of all patient care stations from nurse station
- 2.2-3.3.5.8 **SUPPORT AREAS FOR PRE- & POST - OPERATIVE PATIENT CARE AREAS**
- 2.2-3.3.5.8(1) ___ General support areas in this section are provided in or directly accessible* to pre- & postoperative patient care areas
- 2.2-3.3.5.8(2) Nurse station
 2.1-2.8.2 ___ space for counters
 2.1-2.8.2.1(1) ___ handwashing station next to or directly accessible*
 2.1-2.8.2.1(2) **or**
 ___ hand sanitation dispenser next to or directly accessible*

Architectural Requirements		Building Systems Requirements	
2.1-2.8.2.2	<input type="checkbox"/> Center for reception & communication <input type="checkbox"/> self-contained or <input type="checkbox"/> combined with administrative center or nurse station		
2.1-2.8.3	<input type="checkbox"/> Documentation area		
2.1-2.8.3.1	<input type="checkbox"/> work surface to support documentation process	Nurse Call System: <input type="checkbox"/> Duty station (light/sound signal)	2.1-8.5.1.2(3)(b)
2.2-3.3.5.8(7)	<input type="checkbox"/> Clinical sink		
2.2-3.3.5.8(8)	<input type="checkbox"/> Medication safety zone		
(a)	<input type="checkbox"/> provided in postoperative patient care areas		
2.1-2.8.8.1(2)	Design Promoting Safe Medication Use:		
(a)	<input type="checkbox"/> medication safety zones located out of circulation paths		
(b)	<input type="checkbox"/> work space designed so that staff can access information & perform required tasks	Lighting: <input type="checkbox"/> Task-specific lighting level min. 100 foot-candles	2.1-2.8.8.1(2)(d)
(c)	<input type="checkbox"/> work counters provide space to perform required tasks		
(e)	<input type="checkbox"/> sharps containers placed at height that allows users to see top of container		
(f)	<input type="checkbox"/> max. 45 dBA noise level caused by building systems		
2.1-2.8.8.2(1)	<input type="checkbox"/> medication preparation room	Ventilation:	
(a)	<input type="checkbox"/> under visual control of nursing staff	<input type="checkbox"/> Min. 4 air changes per hour	Table 7.1
(b)	<input type="checkbox"/> work counter	Lighting:	
	<input type="checkbox"/> handwashing station	<input type="checkbox"/> Task lighting	2.1-2.8.8.1(2)(d)
	<input type="checkbox"/> lockable refrigerator		
	<input type="checkbox"/> locked storage for controlled drugs	Nurse Call System:	
	<input type="checkbox"/> sharps containers	<input type="checkbox"/> Duty station (light/sound signal)	Table 2.1-2
	<input type="checkbox"/> <input type="checkbox"/> check if <u>not</u> included in project		
(c)	<input type="checkbox"/> self-contained medication-dispensing unit		
	<input type="checkbox"/> <input type="checkbox"/> check if <u>not</u> included in project		
	<input type="checkbox"/> room designed with space to prepare medications		
	or		
2.1-2.8.8.2(2)	<input type="checkbox"/> automated medication-dispensing unit	Lighting:	
(a)	<input type="checkbox"/> located at nurse station, in clean workroom or in alcove	<input type="checkbox"/> Task lighting	2.1-2.8.8.1(2)(d)
(c)	<input type="checkbox"/> handwashing station located next to stationary medication-dispensing units or stations	Nurse Call System: <input type="checkbox"/> Duty station (light/sound signal)	Table 2.1-2

Architectural Requirements

- 2.2-3.3.5.8(9) ☐ Nourishment area
 ☐ provided in unrestricted patient care area
- 2.1-2.8.9.2(1) ☐ handwashing station
- 2.1-2.8.9.2(2) ☐ work counter
- 2.1-2.8.9.2(3) ☐ refrigerator
- 2.1-2.8.9.2(4) ☐ microwave
- 2.1-2.8.9.2(5) ☐ storage cabinets
- 2.1-2.8.9.2(6) ☐ space for temporary storage of food service implements
- 2.1-2.8.9.3 ☐ provisions for separate temporary storage of unused & soiled meal trays
- 2.2-3.3.5.8(10) ☐ Ice-making equipment
 (b) ☐ not located in semi-restricted area
- 2.2-3.3.5.8(12) ☐ Soiled workroom or soiled holding room (may be combined with Decontamination Room in Sterile Processing Facility)
- 2.2-3.3.7.12 (1)(a) ☐
- (1)(b) ☐ separate soiled workrooms or holding rooms for unrestricted area and semi-restricted area
- or**
- ☐ soiled workroom or holding room shared between unrestricted area and semi-restricted area
 ☐ direct access provided from semi-restricted area
 ☐ separate entrance provided from unrestricted area
- (c) ☐ soiled workroom or holding room do not have direct connection with operating rooms or other sterile activity rooms
- 2.1-2.8.12.2 (1)(a) ☐ soiled workroom
 ☐ handwashing station
- (1)(b) ☐ flushing-rim clinical service sink with bedpan-rinsing device or equivalent flushing-rim fixture
- (1)(c) ☐ work counter
- (1)(d) ☐ space for separate covered containers for waste & soiled linen
- (2) ☐ fluid management system is used
 ☐ check if not included in project
- (a) ☐ electrical & plumbing connections that meet manufacturer requirements
- (b) ☐ space for docking station
- or**
- 2.1-2.8.12.3 ☐ soiled holding room
- (1) ☐ handwashing station or hand sanitation station

Building Systems Requirements

- Ventilation:
☐ Min. 2 air changes per hour Table 7.1
- Nurse Call System:
☐ Duty station (light/sound signal) 2.1-8.5.1.2(3)(b)
- Ventilation:
☐ Min. 10 air changes per hour Table 7.1
☐ Exhaust
☐ Negative pressure
☐ No recirculating room units
- Nurse Call System:
☐ Duty station (light/sound signal) Table 2.1-2
- Ventilation:
☐ Min. 10 air changes per hour Table 7.1
☐ Exhaust
☐ Negative pressure

Architectural Requirements**Building Systems Requirements**

- (2) _____ space for separate covered containers for waste & soiled linen
- 2.2-3.3.7.12(3) _____ other provisions for disposal of liquid waste are made
- (b)

_____ No recirculating room units

2.2-3.3.5.9 **SUPPORT AREAS FOR STAFF**

- _____ Staff toilet room located in postoperative patient care area to maintain staff availability to patients

2.2-3.3.5.10 **SUPPORT AREAS FOR PATIENTS & VISITORS**

- (1) _____ Patient toilet room
- (a) Location:
- _____ directly accessible* to pre- & postoperative patient care area
- Errata _____ private toilet room directly accessible* from each pre- & postoperative single-patient room used for Airborne Infection Isolation
- check if not included in project (only if no AII rooms are provided in pre- & post-operative areas)
- (b) Number:
- _____ one patient toilet for each eight patient care stations or fewer & for each major fraction thereof

2.2-3.3.6 **SUPPORT AREAS IN SEMI-RESTRICTED AREA**

- 2.2-3.3.6.2 _____ Nurse or control stations
- (1) _____ access through all entries to semi-restricted area must be controlled
- (2) _____ nurse or control station located in semi-restricted area
- or**
- _____ nurse or control station located in unrestricted area
- _____ directly accessible* to semi-restricted area
- (3) _____ nurse or control stations permit direct visual observation of traffic into semi-restricted area

- 2.2-3.3.6.6 _____ Hand scrub facilities
- 2.1-2.8.6.1 _____ at least one hand scrub position for each cesarean delivery room, operating room & Class 3 imaging room
- 2.1-2.8.6.2 _____ located next to entrance to each room (one hand scrub station consisting of two scrub positions may be shared if located adjacent* to entrance of each room)
- 2.1-2.8.6.3 _____ placement of scrub station does not restrict min. required corridor width

Architectural Requirements**Building Systems Requirements**

- 2.2-3.3.6.13(1) ☐ Emergency equipment storage
- 2.1-2.8.13.4(1) ☐ each patient care unit has at least one emergency equipment storage location
- 2.1-2.8.13.4(2) ☐ provided under visual observation of staff
- 2.1-2.8.13.4(3) ☐ storage locations in corridors do not encroach on minimum required corridor width
- 2.2-3.3.6.14 ☐ Environmental services room
- (1) ☐ not shared with other areas
- (2) ☐ accessed from semi-restricted corridor
- 2.1-2.8.14.2
- (1) ☐ service sink or floor-mounted mop sink
- (2) ☐ provisions for storage of supplies & housekeeping equipment
- (3) ☐ handwashing station
- or**
- ☐ hand sanitation station

Ventilation:

- ☐ Min. 10 air changes per hour Table 7.1
- ☐ Exhaust
- ☐ Negative pressure
- ☐ No recirculating room units

2.2-3.3.6.15 **“SATELLITE” STERILE PROCESSING FACILITIES**

- ☐ check if not included in project
- 2.1-5.1.2 (only if hospital includes a Central Processing Department or if contractual arrangements are made for off-site processing and support areas for off-site processing are provided in hospital)
- 2.1-5.1.2.1(2) ☐ Sterile processing facility meet requirements of semi-restricted area
- 2.1-5.1.2.1(3) Layout:
- ☐ sterile processing facilities designed to provide one-way traffic pattern
- 2.1-5.1.2.2 ☐ Two-room sterile processing facility
- ☐ check if not included in project
- (1)(a) ☐ decontamination room & clean workroom physically separated by wall containing door or pass-through window
- or**
- ☐ built-in washer/disinfector with pass-through door or window
- (1)(b) ☐ Sterilizer access room for maintaining equipment
- ☐ check if not included in project
- (2) ☐ Decontamination room
- (a) ☐ sized to meet min. equipment space & clearances needed for equipment used
- ☐ equipment shown on plans
- (b) ☐ work counter(s)
- ☐ handwashing station
- ☐ three-basin sink with counter

Ventilation:

- ☐ Min. 6 air changes per hour Table 7.1
- ☐ Exhaust
- ☐ Negative pressure
- ☐ No recirculating room units

Architectural Requirements**Building Systems Requirements**

- | | | | |
|-------------|--|--|-----------|
| | <input type="checkbox"/> flushing-rim clinical sink or equivalent fixture
or
<input type="checkbox"/> alternative methods for disposal of bio-waste

<input type="checkbox"/> space for waste & soiled linen receptacles
<input type="checkbox"/> documentation area
<input type="checkbox"/> instrument air outlet for drying instruments
or
<input type="checkbox"/> portable compressed air for drying instruments

<input type="checkbox"/> storage for decontamination supplies & personal protective equipment (PPE) | | |
| (3) | <input type="checkbox"/> Clean workroom | Ventilation: | |
| (a) | <input type="checkbox"/> sized to accommodate sterilization equipment used
<input type="checkbox"/> equipment shown on plans | <input type="checkbox"/> Min. 4 air changes per hour
<input type="checkbox"/> Positive pressure
<input type="checkbox"/> No recirculating room units | Table 7.1 |
| (b) | <input type="checkbox"/> work counter
<input type="checkbox"/> handwashing station
<input type="checkbox"/> storage for sterilization supplies
<input type="checkbox"/> documentation area
<input type="checkbox"/> instrument air outlet for drying instruments
or
<input type="checkbox"/> portable compressed air for drying instruments

<input type="checkbox"/> cooling area for sterilization cart
<input type="checkbox"/> check if <u>not</u> included in project | | |
| (4) | <input type="checkbox"/> Sterile storage (provided for storage of sterile instruments & supplies) | Ventilation: | |
| (a) | <input type="checkbox"/> area part of clean workroom
or
<input type="checkbox"/> separate storage room | <input type="checkbox"/> Min. 4 air changes per hour
<input type="checkbox"/> Positive pressure | Table 7.1 |
| (b) | <input type="checkbox"/> space for case cart storage
<input type="checkbox"/> check if <u>not</u> included in project (only if case carts are not used) | | |
| 2.1-5.1.2.3 | <input type="checkbox"/> One-room sterile processing facility
<input type="checkbox"/> check if <u>not</u> included in project | | |
| (1) | <input type="checkbox"/> consists of decontamination area & clean work area | | |
| (b) | <input type="checkbox"/> two entrances
or
<input type="checkbox"/> single entrance
<input type="checkbox"/> located approximately equidistant from clean & decontamination sides of room
<input type="checkbox"/> allows for one-way traffic flow | | |

Architectural Requirements		Building Systems Requirements	
(2)	___ decontamination area	Ventilation:	
(a)	___ countertop	___ Min. 6 air changes per hour	Table 7.1
	___ two-basin sink for washing instruments	___ Exhaust	
	___ handwashing station	___ Negative pressure	
	___ separate from instrument-washing sink	___ No recirculating room units	
	___ storage for supplies		
	___ instrument air outlet for drying instruments		
	or		
	___ portable compressed air for drying instruments		
(b)	___ instrument-washing sink separated from clean work area by 4'-0" foot distance from edge of sink		
	or		
	___ instrument-washing sink separated from clean work area by wall		
	or		
	___ instrument-washing sink separated from clean work area by screen		
	___ screen extends min. 4'-0" above sink rim		
(3)	___ clean work area	Ventilation:	
(a)	___ countertop	___ Min. 4 air changes per hour	Table 7.1
(b)	___ sterilizer	___ Positive pressure	
(c)	___ storage for supplies	___ No recirculating room units	
(d)	___ instrument air outlet for drying instruments		
	or		
	___ portable compressed air for drying instruments		
2.1-5.1.2.4	___ Equipment & supply storage	Ventilation:	
(1)	___ instrument & supply storage provided for sterile & clean instruments & supplies	___ Min. 4 air changes per hour	Table 7.1
(a)	___ separate room	___ Positive pressure	
	or		
	___ portion of clean workroom		
(b)	___ space for case cart storage		
	<input type="checkbox"/> check if <u>not</u> included in project (only if case carts are not used in facility)		
(2)	___ clean/sterile medical/surgical supply receiving room	Ventilation:	
		___ Min. 4 air changes per hour	Table 7.1
		___ Positive pressure	
2.1-5.1.2.5	Support Areas for Staff:		
(1)(a)	___ separate changing areas provided for male & female staff (unisex changing area with one or more private changing rooms is permitted)		

Architectural Requirements

- (1)(b) ☐ staff changing areas meet requirements
- (1)(c) ☐ of unrestricted area (may be shared with other departments or services)
- (2)(a) ☐ lockers
- (2)(b) ☐ toilet room
- (2)(c) ☐ handwashing station
- (2)(d) ☐ space for donning surgical attire
- (2)(e) ☐ provision for separate storage of clean & soiled work attire

Building Systems Requirements

Ventilation:

- ☐ Min. 10 air changes per hour Table 7.1
- ☐ Exhaust
- ☐ Negative pressure
- ☐ No recirculating room units

2.2-3.3.7 **SUPPORT AREAS DIRECTLY ACCESSIBLE TO SEMI-RESTRICTED AREA**

- 2.2-3.3.7.12 ☐ Soiled workroom or soiled holding room
- (c) ☐ no direct connection with operating rooms or other sterile activity rooms

2.1-2.8.12.2

- ☐ soiled workroom
- (1)(a) ☐ handwashing station
- (1)(b) ☐ flushing-rim clinical service sink with bedpan-rinsing device or equivalent flushing-rim fixture
- (1)(c) ☐ work counter
- (1)(d) ☐ space for separate covered containers for waste & soiled linen
- (2) ☐ fluid management system is used
- (a) ☐ ☐ check if not included in project
- ☐ electrical & plumbing connections that meet manufacturer requirements
- (b) ☐ space for docking station

Ventilation:

- ☐ Min. 10 air changes per hour Table 7.1
- ☐ Exhaust
- ☐ Negative pressure
- ☐ No recirculating room units

Nurse Call System:

- ☐ Duty station (light/sound signal) Table 2.1-2

or

2.1-2.8.12.3

- ☐ soiled holding room
- (1) ☐ handwashing station or hand sanitation station
- (2) ☐ space for separate covered containers for waste & soiled linen
- 2.2-3.3.7.12(3) ☐ other provisions for disposal of liquid waste are provided and described in Project Narrative

Ventilation:

- ☐ Min. 10 air changes per hour Table 7.1
- ☐ Exhaust
- ☐ Negative pressure
- ☐ No recirculating room units

2.2-3.3.7.13

- ☐ Clean equipment & supply storage for clean equipment & supplies used in semi-restricted & restricted areas
- (1) ☐ general clean equipment & supply room separate from & have no direct connection with soiled holding room
- (2) ☐ min. 50 sf per operating room
- ☐ min. 300 sf

Ventilation:

- ☐ Min. 4 air changes per hour Table 7.1
- ☐ Positive pressure
- ☐ No recirculating room units

Architectural Requirements**Building Systems Requirements**

- 2.2-3.3.8 **OTHER SUPPORT AREAS IN SURGERY DEPARTMENT**
- 2.2-3.3.8.13(1) ☐ Clean linen storage (may be in designated location in clean supply & equipment storage room)
- (3) ☐ Storage space for gurneys, stretchers & wheelchairs
- (5) ☐ Medical gas storage
☐ space for supply & storage of medical gases used in facility including space for reserve cylinders provided
☐ protected in accordance with NFPA 99 Health Care Facilities Code
- (6) ☐ Storage for large clinical equipment
☐ check if not included in project
- 2.2-3.3.8.16 ☐ Storage for blood, organs, tissue & pathological specimens
- (1) ☐ equipment temperature controls alarms & monitoring
- 2.1-4.1.2.3 ☐ Refrigerated storage facilities
- (1) ☐ refrigerator
- (2) ☐ blood storage facilities
- 2.2-3.3.8.17 ☐ Area for preparation & examination of frozen sections
☐ located in Surgical Department
or
☐ located in general laboratory
☐ immediate results are obtainable
- 2.2-3.3.9 **SUPPORT AREAS FOR SURGERY DEPARTMENT STAFF**
- 2.2-3.3.9.1 ☐ Staff lounge
- 2.2-3.3.9.4 ☐ Staff changing area & toilet facilities
- (1) ☐ one or more private changing rooms or areas for male & female staff working in semi-restricted & restricted areas of surgery department
- (2)(a) ☐ lockers
- (2)(b) ☐ showers
- (2)(c) ☐ toilets
- (2)(d) ☐ handwashing stations
- (2)(e) ☐ space for donning & doffing surgical attire
- (2)(f) ☐ provisions for separate storage of clean & soiled surgical attire

Ventilation:

- ☐ Min. 10 air changes per hour Table 7.1
- ☐ Exhaust
- ☐ Negative pressure
- ☐ No recirculating room units

Architectural Requirements**Building Systems Requirements****2.2-3.3.10 SUPPORT AREAS FOR PATIENTS FAMILIES & VISITORS**

- 2.2-3.3.10.3 ☐ Patient changing area
☐ check if not included in project (only if patients are assigned private holding rooms or cubicles)
- (1)(a) ☐ provisions for storing patients' belongings during procedures
- (1)(b) ☐ toilet room
- (1)(c) ☐ space for changing or gowning
- 2.2-3.3.10.4 ☐ Waiting area for families & visitors

Ventilation:

- ☐ Min. 10 air changes per hour Table 7.1
- ☐ Exhaust
- ☐ Negative pressure
- ☐ No recirculating room units

***LOCATION TERMINOLOGY:**

Directly accessible: Connected to the identified area or room through a doorway, pass-through, or other opening without going through an intervening room or public space

Adjacent: Located next to but not necessarily connected to the identified area or room

Immediately accessible: Available either in or adjacent to the identified area or room

Readily accessible: Available on the same floor or in the same clinic as the identified area or room

Architectural Details & MEP Requirements**2.1-7.2.2 ARCHITECTURAL DETAILS****CORRIDOR WIDTH:**

- 2.1-7.2.2.1 ☐ Aisles, corridors & ramps required for exit access in a hospital not less than 8'-0" in clear & unobstructed width

or

- ☐ Detailed code review incorporated in Project Narrative

- ☐ Aisles, corridors & ramps in adjunct areas not intended for the housing, treatment, or use of inpatients not less than 44" in clear & unobstructed width

or

- ☐ Detailed code review incorporated in Project Narrative

2.1-7.2.2.2 CEILING HEIGHT:

- (1) ☐ Min ceiling height 7'-6" in corridors & in normally unoccupied spaces
- (2) ☐ Min. height 7'-0" in radiography, procedure & operating rooms from floor to lowest protruding element of equipment or fixture in stowed position

- (3) ☐ Min. height 7'-6" above floor of suspended tracks, rails & pipes located in traffic path for patients in beds & on stretchers
- ☐ Min. ceiling height 7'-10" in other areas

2.1-7.2.2.3 DOORS & DOOR HARDWARE:**(1) Door Type:**

- (a) ☐ doors between corridors, rooms, or spaces subject to occupancy swing type or sliding doors
- (b) ☐ sliding doors
- ☐ check if not included in project
- ☐ manual or automatic sliding doors comply with NFPA 101
- ☐ detailed code review included in Project Narrative
- ☐ no floor tracks

(2) Door Opening:

- (a) ☐ min. 45.5" clear door width for diagnostic/treatment areas
- ☐ min. 83.5" clear door height for diagnostic/treatment areas
- (b) ☐ swinging doors for personnel use in addition to sliding doors
- ☐ check if not included in project
- ☐ min. clear width 34.5"

- (3) Door Swing:
(a) _____ doors do not swing into corridors except doors to non-occupiable spaces & doors with emergency breakaway hardware
- (4) _____ Lever hardware or push/pull latch hardware
- (5) Doors for Patient Toilet Facilities:
(a) _____ two separate doors
or
_____ door that swings outward
or
_____ door equipped with emergency rescue hardware (permits quick access from outside the room to prevent blockage of the door)
or
_____ sliding door other than pocket door
- (b) _____ toilet room opens onto public area or corridor
□ check if not included in project
_____ visual privacy is maintained
- 2.1-7.2.2.7 GLAZING MATERIALS:
_____ Glazing within 1 foot 6 inches of floor
□ check if not included in project
_____ must be safety glass, wire glass or plastic break-resistant material
- 2.1-7.2.2.8 HANDWASHING STATIONS:
(1)(c) _____ Handwashing stations in patient care areas located so they are visible & unobstructed
- (3)
(a) _____ Handwashing station countertops made of porcelain, stainless steel, solid-surface materials or impervious plastic laminate assembly
- (b) _____ Countertops substrate
□ check if not included in project
_____ marine-grade plywood (or equivalent material) with impervious seal
- (4) _____ Handwashing station casework
□ check if not included in project
_____ designed to prevent storage beneath sink

- (5) _____ Provisions for drying hands
□ check if not included in project (only at hand scrub facilities)
- (a) _____ hand-drying device does not require hands to contact dispenser
- (b) _____ hand-drying device is enclosed to protect against dust or soil & to ensure single-unit dispensing
- (6) _____ Liquid or foam soap dispensers
- 2.1-7.2.2.9 GRAB BARS:
(1) _____ Grab bars anchored to sustain concentrated load 250 pounds
- (3) _____ Ends of grab bars constructed to prevent snagging clothes of patients staff & visitors
- 2.1-7.2.2.11 RADIATION PROTECTION:
□ check if no radiation emitting equipment is included in project
_____ Protection for X-ray & Gamma-ray installations are shown in the plans
_____ Documentation for radiation protection has been submitted separately to the DPH Radiation Control Program
- 2.1-7.2.2.12 NOISE CONTROL:
(1) _____ Recreation rooms, exercise rooms equipment rooms & similar spaces where impact noises may be generated are not located directly over operating suites
or
_____ Special provisions are made to minimize impact noise
- (2) _____ Noise reduction criteria in Table 1.2-6 applicable to partitions, floors & ceiling construction are met in patient areas
- 2.1-7.2.3 SURFACES
2.1-7.2.3.1 FLOORING & WALL BASES:
(1) _____ Flooring surfaces cleanable & wear-resistant for location
- (3) _____ Smooth transitions provided between different flooring materials
- (4) _____ Flooring surfaces including those on stairways are stable, firm & slip-resistant
- (5) _____ Floors & wall bases of soiled workrooms, toilet rooms & other areas subject to frequent wet cleaning are constructed of materials that are not physically affected by germicidal or other types of cleaning solutions

- (7)(a) ☐ Floors are monolithic & integral coved wall bases are at least 6" high & tightly sealed to wall in rooms listed below
- Operating rooms
 - Procedure rooms where cystoscopy, urology & endoscopy procedures are performed
 - Airborne infection isolation (AII) room & any anteroom
 - Protective environment (PE) room & any anteroom
 - Sterile processing facility

2.1-7.2.3.2 WALLS & WALL PROTECTION:

- (1)(a) ☐ Wall finishes are washable
- (1)(b) ☐ Wall finishes near plumbing fixtures are smooth, scrubbable & water-resistant
- (2) ☐ Wall surfaces in areas routinely subjected to wet spray or splatter are monolithic or have sealed seams that are tight & smooth
- (5) ☐ Wall protection devices & corner guards durable & scrubbable
- 2.1-7.2.3.3 CEILINGS:
- (1) ☐ Ceilings provided in all areas except mechanical, electrical & communications equipment rooms
- (a) ☐ Ceilings cleanable with routine housekeeping equipment
- (b) ☐ Acoustic & lay-in ceilings where used do not create ledges or crevices

- (2) Semi-Restricted Areas:
☐ check if not included in project
- (a) ☐ ceiling finishes are scrubbable, non absorptive, non perforated, & capable of withstanding cleaning with chemicals
- (b) ☐ lay-in ceilings
☐ gasketed or each ceiling tile weighs min. 1lbs./sq. ft.
- (c) ☐ no perforated, tegular, serrated or highly textured tiles

or

- ☐ ceilings of monolithic construction

- (3) Restricted Areas:
☐ check if not included in project
- (a) ☐ ceilings of monolithic construction (except for central diffuser array)
- (b) ☐ ceiling finishes scrubbable & capable of withstanding cleaning & disinfecting chemicals
- (c) ☐ access openings are gasketed

2.1-7.2.4

2.1-7.2.4.1

2.1-7.2.4.3

2.1-8.2

Part 3/6.1

Part 3/6.1.1

Part 3/6.1.2

Part 3/6.1.2.1

Part 3/6.1.2.2

Part 3/6.2

Part 3/6.2.1

FURNISHINGS:

- ☐ Built-in furnishings upholstered with impervious materials in patient treatment areas with risks of exposure & contamination from bodily fluids & other fluids
- ☐ Privacy curtains in patient care areas are washable

HEATING VENTILATION & AIR-CONDITIONING (HVAC) SYSTEMS UTILITIES:

Ventilation Upon Loss of Electrical Power:

- ☐ space ventilation & pressure relationship requirements of Table 7.1 are maintained for AII Rooms & Operating Rooms in event of loss of normal electrical power

Heating & Cooling Sources:

- ☐ heat sources & essential accessories provided in number & arrangement sufficient to accommodate facility needs (reserve capacity) even when any one of heat sources or essential accessories is not operating due to breakdown or routine maintenance
- ☐ capacity of remaining source or sources is sufficient to provide heating for operating rooms & recovery rooms

Central cooling systems greater than 400 tons (1407 kW) peak cooling load

- ☐ check if not included in project
- ☐ number & arrangement of cooling sources & essential accessories is sufficient to support facility operation plan upon breakdown or routine maintenance of any one of cooling sources

AIR-HANDLING UNIT (AHU) DESIGN:

- ☐ AHU casing is designed to prevent water intrusion, resist corrosion & permit access for inspection & maintenance

Part 3/6.3 OUTDOOR AIR INTAKES & EXHAUST DISCHARGES:

Part 3/6.3.1 Outdoor Air Intakes:

- Part 3/6.3.1.1 ☐ located min. of 25'-0" from cooling towers & all exhaust & vent discharges
- ☐ outdoor air intakes located such that bottom of air intake is at least 6'-0" above grade
- ☐ air intakes located away from public access

- Part 3/6.3.1.3 ☐ intakes on top of buildings
- ☐ check if not included in project
- ☐ located with bottom of air intake min. of 3'-0" above roof level

- Part 3/6.3.1.4 ☐ intake in areaway
- ☐ check if not included in project
- ☐ bottom of areaway air intake opening is at least 6'-0" above grade
- ☐ bottom of air intake opening from areaway into building is at least 3'-0" above bottom of areaway

Part 3/6.3.2 Exhaust Discharges for Infectious Exhaust Air:

- ☐ check if not included in project
- Part 3/6.3.2.1 ☐ ductwork within building is under negative pressure for exhaust of contaminated air (i.e. air from AII rooms)
- ☐ exhaust discharge outlets with contaminated air located such that they reduce potential for recirculation of exhausted air back into building

- Part 3/6.3.2.2 ☐ exhaust discharge outlets with contaminated air is arranged to discharge to atmosphere in vertical direction at least 10 feet above adjoining roof level
- ☐ exhaust discharge outlets from laboratory work area chemical fume hoods discharge with stack velocity of at least 2500 fpm
- ☐ exhaust discharge outlets from AII rooms bronchoscopy & sputum collection exhaust & laboratory work area chemical fume hoods is located not less than 25 feet horizontally from outdoor air intakes, openable windows/doors & areas that are normally accessible to public

Part 3/6.4 FILTRATION:

- ☐ Two filter banks for inpatient care (see Table 6.4)
- ☐ Filter Bank No. 1: MERV 7
- ☐ Filter Bank No. 2: MERV 14
- ☐ One filter bank MERV 13 for laboratories (see Table 6.4)
- ☐ Each filter bank with efficiency of greater than MERV 12 is provided with differential pressure measuring device to indicate when filter needs to be changed

- Part 3/6.4.1 ☐ Filter Bank No. 1 is placed upstream of heating & cooling coils

- Part 3/6.4.2 ☐ Filter Bank No. 2 is placed downstream of all wet-air cooling coils & supply fan

Part 3/6.5 HEATING & COOLING SYSTEMS:

- Part 3/6.5.3 ☐ Radiant heating systems
- ☐ check if not included in project
- ☐ ceiling or wall panels with exposed cleanable surfaces or radiant floor heating are provided in AII room, PE room, OR or procedure room

Part 3/6.7 AIR DISTRIBUTION SYSTEMS:

- Part 3/6.7.1 ☐ Maintain pressure relationships required in tables 7.1 in all modes of HVAC system operation
- ☐ Spaces that have required pressure relationships are served by fully ducted return systems or fully ducted exhaust systems
- ☐ Inpatient facilities & recovery rooms are served by fully ducted return or exhaust systems

- Part 3/6.7.2 Air Distribution Devices:
- ☐ supply air outlets comply with Table 6.7.2

- Part 3/6.7.3 Smoke Barriers:
- ☐ HVAC zones coordinated with compartmentation to minimize ductwork penetrations of fire & smoke barriers.

Part 3/6.8 ENERGY RECOVERY SYSTEMS:

- ☐ check if not included in project
- Part 3/6.8.1 ☐ Located upstream of Filter Bank No. 2
- Part 3/6.8.2 ☐ AII room exhaust systems or combination AII/PE rooms are not used for energy recovery

- Part 3/6.8.3 ☐ Energy recovery systems with leakage potential
☐ check if not included in project
☐ arranged to minimize potential to transfer exhaust air directly back into supply airstream
☐ designed to have no more than 5% of total supply airstream consisting of exhaust air
☐ not used from these exhaust airstream sources: waste anesthesia gas disposal, soiled or decontamination room

Part 3/7 SPACE VENTILATION

- Part 3/7.1.a ☐ Spaces ventilated according to Table 7.1
- Part 3/7.1.a.1 ☐ Air movement is from clean to less-clean areas
- Part 3/7.1.a.3 ☐ Min. number of total air changes required for positive pressure rooms is provided by total supply airflow
☐ Min. number of total air changes required for negative pressure rooms is provided by total exhaust airflow
- Part 3/7.1.a.4 ☐ Entire minimum outdoor air changes per hour required by Table 7.1 for each space meet filtration requirements of Section 6.4
- Part 3/7.1.a.5 ☐ Air recirculation through room unit
☐ check if not included in project
☐ complies with Table 7.1
☐ room unit receive filtered & conditioned outdoor air
☐ serve only a single space
☐ provides min. MERV 6 filter located upstream of any cold surface so that all of air passing over cold surface is filtered

Part 3/7.2 ADDITIONAL ROOM-SPECIFIC REQUIREMENTS:

- Part 3/7.2.1 Airborne Infection Isolation (AII) Rooms
☐ check if not included in project
☐ AII rooms have permanently installed device and/or mechanism to constantly monitor differential air pressure between room & corridor
☐ Local visual means is provided to indicate whenever negative differential pressure is not maintained
☐ Air from AII room is exhausted directly to outdoors

- ☐ Exhaust air from AII rooms, associated anterooms & toilet rooms is discharged directly to outdoors without mixing with exhaust air from any other non-AII room or exhaust system
- ☐ Exhaust air grille or register in patient room is located directly above patient bed on ceiling or on wall near head of bed
- ☐ Anteroom
☐ check if not included in project
☐ AII room is at negative pressure with respect to anteroom
☐ Anteroom is at negative pressure with respect to corridor

Part 3/7.4.1 Operating Rooms

- ☐ check if not included in project
- ☐ Each OR has individual temperature control
- ☐ OR is provided with primary supply diffuser array designed as follows:
☐ airflow is unidirectional downwards & average velocity of diffusers is 25 to 35 CFM/ft²
☐ diffusers are concentrated to provide airflow pattern over patient & surgical team
☐ coverage area of primary supply diffuser array extends min. 12" beyond footprint of surgical table on each side
☐ no more than 30% of portion of primary supply diffuser array is used for non-diffuser uses
☐ additional supply diffusers provided within room outside of primary supply diffuser array
☐ check if not included in project
☐ each OR has at least two low sidewall return or exhaust grilles spaced at opposite corners or as far apart as possible with bottom of these grilles installed approximately 8" above floor

Part 3/7.4.3 Imaging Procedure Rooms

- ☐ check if not included in project
- ☐ Anesthetic gases are administered
☐ ventilation requirements for operating rooms are met
- or**
- ☐ No anesthetic gases are administered

2.1-8.3 ELECTRICAL SYSTEMS**2.1-8.3.2 ELECTRICAL DISTRIBUTION & TRANSMISSION**

- 2.1-8.3.2.2 Panelboards:
- (1) ☐ panelboards serving life safety branch circuits serve floors on which they are located & floors immediately above & below
- (2) ☐ panelboard critical branch circuits serve floors on which they are located
- (3) ☐ panelboards not located in exit enclosures or exit passageways
- 2.1-8.3.2.3 Ground-Fault Circuit Interrupters in Critical Care Areas:
- ☐ check if not included in project
- (2) ☐ each receptacle individually protected by single GFCI device

2.1-8.3.3 POWER-GENERATING & -STORING EQUIPMENT

- 2.1-8.3.3.1 ☐ Essential electrical system or emergency electrical power
- (1) ☐ essential electrical system complies with NFPA 99
- (2) ☐ emergency electrical power complies with NFPA 99

2.1-8.3.5 ELECTRICAL EQUIPMENT

- 2.1-8.3.5.1 ☐ Handwashing sinks & scrub sinks that depends on building electrical service for operation are connected to essential electrical system
- ☐ check if not included in project
- 2.1-8.3.5.2 ☐ Electronic health record system servers & centralized storage provided with uninterruptible power supply

2.1-8.3.6 ELECTRICAL RECEPTACLES

- 2.1-8.3.6.1 Receptacles In Corridors:
- (1) ☐ duplex-grounded receptacles for general use installed 50'-0" apart or less in all corridors
- ☐ duplex-grounded receptacles for general use installed within 25'-0" of corridor ends
- 2.1-8.3.6.3 Essential Electrical System Receptacles:
- (1) ☐ cover plates for electrical receptacles supplied from essential electrical system are distinctively colored or marked for identification
- (2) ☐ same color is used throughout facility

2.1-8.4 PLUMBING SYSTEMS

- 2.1-8.4.2 Plumbing & Other Piping Systems:
- 2.1-8.4.2.1(3) ☐ no plumbing piping exposed overhead or on walls where possible accumulation of dust or soil may create cleaning problem
- 2.1-8.4.2.5 Heated Potable Water Distribution Systems:
- (2) ☐ heated potable water distribution systems serving patient care areas are under constant recirculation
- ☐ non-recirculated fixture branch piping max. length 25'-0"
- (3)(a) ☐ no installation of dead-end piping (except for empty risers mains & branches for future use)
- (3)(c) ☐ any existing dead-end piping is removed
- ☐ check if not included in project
- (4)(a) ☐ water-heating system supplies water at temperatures & amounts indicated in Table 2.1-4
- 2.1-8.4.2.6 Drainage Systems:
- (1)(a) ☐ drainage piping installed above ceiling of or exposed in operating rooms, procedure rooms, sterile processing facilities, electronic data processing areas & electric closets
- ☐ check if not included in project
- ☐ special provisions to protect space below from leakage & condensation
- (1)(b) ☐ drip pan for drainage piping above ceiling of sensitive area
- ☐ check if not included in project
- ☐ accessible
- ☐ overflow drain with outlet located in normally occupied area that is not open to restricted area
- (2) Floor Drains:
- (a) ☐ no floor drains in procedure rooms, operating rooms, Class 2 & Class 3 imaging rooms
- (b) ☐ floor drain in dedicated cystoscopy procedure room
- ☐ check if not included in project
- ☐ recessed floor sink with automatic trap primer

2.1-8.4.3 PLUMBING FIXTURES

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

- 2.1-8.4.3.2 Handwashing Station Sinks:
- (1) ☐ sinks in handwashing stations are designed with basins that will reduce risk of splashing to areas where direct patient care is provided, sterile procedures are performed & medications are prepared
- (2) ☐ sink basins have nominal size of no less than 144 square inches
- ☐ sink basins have min. dimension 9 inches in width or length
- (3) ☐ sink basins are made of porcelain, stainless steel or solid-surface materials
- (5) ☐ water discharge point of faucets is at least 10" above bottom of basin
- (7) ☐ anchored so that allowable stresses are not exceeded where vertical or horizontal force of 250 lbs. is applied
- (8) ☐ sinks used by staff, patients, & public have fittings that can be operated without using hands (may be single-lever or wrist blade devices)
- (a) ☐ blade handles
- ☐ check if not included in project
- ☐ at least 4 inches in length
- ☐ provide clearance required for operation
- (b) ☐ sensor-regulated water fixtures
- ☐ check if not included in project
- ☐ meet user need for temperature & length of time water flows
- ☐ designed to function at all times and during loss of normal power

2.1-8.4.3.4 Ice-Making Equipment:

☐ copper tubing provided for supply connections to ice-making equipment

- 2.1-8.4.3.5 Clinical Flushing-Rim Sinks:
- (1) ☐ trimmed with valves that can be operated without hands (may be single-lever or wrist blade devices)
- (a) ☐ handles are at least 6 in. long
- (b) ☐ integral trap wherein upper portion of water trap provides visible seal

2.1-8.4.3.6 Scrub Sinks:

(1) ☐ freestanding scrub sinks are trimmed with foot, knee or electronic sensor controls

- (2) ☐ no single-lever wrist blades except for temperature pre-set valve

2.1-8.4.4 MEDICAL GAS & VACUUM SYSTEMS

☐ Station outlets provided as indicated in Table 2.1-3

2.1-8.5.1 CALL SYSTEMS

- 2.1-8.5.1.1(1) ☐ Nurse call stations provided as required in Table 2.1-2
- 2.1-8.5.1.1(2) ☐ Nurse call systems report to attended location with electronically supervised visual & audible annunciation as indicated in Table 2.1-2
- 2.1-8.5.1.1(4) ☐ Call system complies with UL 1069 "Standard for Hospital Signaling & Nurse Call Equipment"
- 2.1-8.5.1.1(5) ☐ Wireless nurse call system
- ☐ check if not included in project
- ☐ complies with UL 1069
- 2.1-8.5.1.2(4) ☐ Nurse call system provided in each patient care area as required in Table 2.1-2
- 2.1-8.5.1.3 Bath Stations:
- ☐ bath station that can be activated by patient lying on floor provided at each patient toilet
- (1) ☐ alarm in these areas can be turned off only at bath station where it was initiated
- (3) ☐ toilet bath stations located on the side of toilets within 12" of front of toilet bowl & 3'-0" to 4'-0" above floor
- 2.1-8.5.1.5 ☐ Emergency call stations are equipped with continuous audible or visual confirmation to person who initiated the code call

2.1-8.6.2 ELECTRONIC SURVEILLANCE SYSTEMS

- ☐ check if not included in project
- 2.1-8.6.2.2 ☐ monitoring devices are located so they are not readily observable by general public or patients
- 2.1-8.6.2.3 ☐ electronic surveillance systems receive power from essential electrical system