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:
- 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.

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)

Satellite Address: (if applicable)

Project Description:

Submission Dates:

Initial Date:

Revision Date:

MDPH/DHCFLC 12/19 IP14
### Architectural Requirements

**Surgical Services**

2.2-3.3.1.1  Location & Layout:

(4)  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

### Building Systems Requirements

### PROCEDURE ROOMS

☐ check if not included in project

2.2-3.3.2.1(1)  Application:

(a)  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)  Location:

(a)  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  

☐ min. clear floor area 160 sf

(1)(c)  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

☐ 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

<table>
<thead>
<tr>
<th>Ventilation:</th>
<th>Table 7.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 15 air changes per hour</td>
<td></td>
</tr>
<tr>
<td>Positive pressure</td>
<td></td>
</tr>
<tr>
<td>No recirculating room units</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power:</th>
<th>Table 2.1-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 12 receptacles in total</td>
<td></td>
</tr>
<tr>
<td>Min. 8 receptacles convenient to table placement with at least one on each wall</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nurse Call System:</th>
<th>Table 2.1-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff assistance station</td>
<td></td>
</tr>
<tr>
<td>Emergency call station</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Gases:</th>
<th>Table 2.1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OX, 2 VAC, 1 MA</td>
<td></td>
</tr>
</tbody>
</table>
## Architectural Requirements

(2)(b)  
- an 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
  - 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:
  - handwashing station located in procedure room  
  - or  
  - 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
  - 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(1)  
- General Operating Room
  - ☐ check if not included in project
  - Space Requirements:
    - (may include minor wall encroachments max. 12" deep by max. 10% of wall length)
      - min. clear floor area 400 sf
      - 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

<table>
<thead>
<tr>
<th>Ventilation:</th>
<th>Table 7.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ Min. 20 air changes per hour</td>
<td></td>
</tr>
<tr>
<td>__ Positive pressure</td>
<td></td>
</tr>
<tr>
<td>__ No recirculating room units</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lighting:</th>
<th>2.1-8.3.4.3(4) (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ General lighting in addition to special lighting units provided at surgical table</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power:</th>
<th>Table 2.1-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ Min. 36 receptacles in total</td>
<td></td>
</tr>
<tr>
<td>__ Min. 16 receptacles convenient to table placement</td>
<td></td>
</tr>
<tr>
<td>Min. 2 on each wall</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nurse Call System:</th>
<th>Table 2.1-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ Staff assistance station</td>
<td></td>
</tr>
<tr>
<td>__ Emergency call station</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Gases:</th>
<th>Table 2.1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ 2 OX, 5 VAC, 1 MA, 1 WAGD</td>
<td>+ Errata</td>
</tr>
</tbody>
</table>
### Architectural Requirements

2.2-3.3.3

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Documentation area</td>
</tr>
<tr>
<td></td>
<td>accommodations for written and/or electronic documentation</td>
</tr>
<tr>
<td>(2)</td>
<td>use of documentation area allows for direct observation of patient</td>
</tr>
</tbody>
</table>

2.2-3.3.4

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medical image viewers (e.g. X-ray film or digital)</td>
</tr>
</tbody>
</table>

2.2-3.3.5(3)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Communications System:</td>
</tr>
<tr>
<td></td>
<td>all operating rooms are equipped with emergency communication system that incorporates push activation of emergency call switch</td>
</tr>
<tr>
<td>(b)</td>
<td>each operating room have system for emergency communication with surgery department control station</td>
</tr>
</tbody>
</table>

(2) Operating room for image-guided surgery

- check if not included in project

### Building Systems Requirements

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

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Construction &amp; Major Renovations:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>min. clear floor area 600 sf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>min. clear dimension 20'-0&quot;</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limited Renovations:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>min. clear floor area 500 sf</td>
<td></td>
</tr>
<tr>
<td></td>
<td>min. clear dimension 20'-0&quot;</td>
<td></td>
</tr>
</tbody>
</table>
Architectural Requirements

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

2.2-3.3.6 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:
☐ (may include minor wall encroachments)
☐ max. 12” deep by max. 10% of wall length)
☐ min. clear floor area 400 sf
☐ 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

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(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 Documentation area
☐ accommodations for written and/or electronic documentation
☐ use of documentation area allows for direct observation of patient

2.2-3.3.4 Medical image viewers (e.g. X-ray film or digital)

2.2-3.3.5(3) Communications System:
☐ all operating rooms are equipped with emergency communication system that incorporates push activation of emergency call switch

Building Systems Requirements

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 Table 2.1-2

Nurse Call System:
☐ Staff assistance station
☐ Emergency call station

Medical Gases:
☐ 2 OX, 5 VAC, 1 MA, 1 WAGD + Errata Table 2.1-3
<table>
<thead>
<tr>
<th>Architectural Requirements</th>
<th>Building Systems Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(b)</strong></td>
<td></td>
</tr>
<tr>
<td>each operating room have system for emergency communication with surgery department control station</td>
<td></td>
</tr>
</tbody>
</table>

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 equipment as well as other fixed ancillary equipment & movable ancillary equipment

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

2.2-3.3.4.6 System component room

2.2-3.4.2.5(1) **Location:**

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:**

☐ 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

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) Shielded control room
(a) 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 Planning Configuration of MRI Suite:
(1) 
   — 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

| (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 MRI control room

| (1) | 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) Space Requirements:

| (a) | 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

#### 2.2-3.4.5.9 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

(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

2.2-3.4.8(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

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement Details</th>
</tr>
</thead>
</table>
| 2.1-3.4.1.4 | Number of Patient Care Stations:  
(1) | ____ 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 |

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement Details</th>
</tr>
</thead>
</table>
| 2.1-3.4.2.2 | Space Requirements:  
(2)(a) | ____ 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  

Ventilation:  
____ Min. 6 air changes per hour  
____ No recirculating room units  

Power:  
____ Min. 8 receptacles in total  
____ convenient to head of gurney or bed  

Nurse Call System:  
____ Staff assistance station  
____ Emergency call station  

Medical Gases:  
____ 1 OX, 3 VAC, 1 MA per station |
| (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  
____ No recirculating room units  

Power:  
____ Min. 8 receptacles in total  
____ convenient to head of gurney or bed  

Nurse Call System:  
____ Staff assistance station  
____ Emergency call station  

Medical Gases:  
____ 1 OX, 3 VAC, 1 MA per station |

### Building Systems Requirements
Architectural 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

Building Systems Requirements

Ventilation:  
- Min. 6 air changes per hour  
- No recirculating room units  
Table 7.1

Power:  
- Min. 8 receptacles in total  
  - convenient to head of gurney or bed  
Table 2.1-1

Nurse Call System:  
- Staff assistance station  
- Emergency call station  
Table 2.1-2

Medical Gases:  
- 1 OX, 3 VAC, 1 MA per station  
Table 2.1-3

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
### Architectural Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1-2.4.2.4</strong></td>
<td>Architectural Details &amp; Furnishings:</td>
</tr>
<tr>
<td>(1)(a)</td>
<td>perimeter walls, ceiling &amp; floor including penetrations constructed to prevent air exfiltration</td>
</tr>
<tr>
<td>(1)(b)</td>
<td>self-closing devices on all room exit doors or activation of audible alarm when AII room is in use as isolation room</td>
</tr>
<tr>
<td><strong>2.1-2.4.2.5</strong></td>
<td>room pressure visual or audible alarm</td>
</tr>
</tbody>
</table>

### Building Systems Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.1-2.4.2.4</strong></td>
<td>Architectural Details &amp; Furnishings:</td>
</tr>
<tr>
<td>(1)</td>
<td>edge seals provided along sides &amp; top of doorframe for any door into AII room</td>
</tr>
<tr>
<td><strong>2.1-2.4.2.5</strong></td>
<td>room pressure visual or audible alarm</td>
</tr>
</tbody>
</table>

## Patient Privacy

### **2.1-2.1.2**

- provisions are made to address patient visual & speech privacy

### **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
  - at least 1 handwashing station for every 4 patient care stations or fewer & for each major fraction thereof
  - □ handwashing stations evenly distributed

### **2.1-2.8.2**

- Nurse station

### **2.1-2.8.2.1(1)**

- space for counters

### **2.1-2.8.2.1(2)**

- handwashing station next to or directly accessible*
  - □ hand sanitation dispenser next to or directly accessible*
## Architectural Requirements

### 2.1-2.8.2.2 Center for reception & communication
- **self-contained**
- **or**
- **combined with administrative center or nurse station**

### 2.1-2.8.3 Documentation area
- **work surface to support documentation process**

### 2.2-3.3.5.8(7) Clinical sink

### 2.2-3.3.5.8(8) Medication safety zone
- **provided in postoperative patient care areas**

#### Design Promoting Safe Medication Use:
1. **medication safety zones located out of circulation paths**
2. **work space designed so that staff can access information & perform required tasks**
3. **work counters provide space to perform required tasks**
4. **sharps containers placed at height that allows users to see top of container**
5. **max. 45 dBA noise level caused by building systems**

### 2.1-2.8.8.2(1) Medication preparation room
- **under visual control of nursing staff**
- **work counter**
- **handwashing station**
- **lockable refrigerator**
- **locked storage for controlled drugs**
- **sharps containers**
- **check if not included in project**
- **self-contained medication-dispensing unit**
- **room designed with space to prepare medications**

### 2.1-2.8.8.2(2) Automated medication-dispensing unit
- **located at nurse station, in clean workroom or in alcove**
- **handwashing station located next to stationary medication-dispensing units or stations**

## Building Systems Requirements

### Nurse Call System:
- **Duty station (light/sound signal)** 2.1-8.5.2(3)(b)

### Lighting:
- **Task-specific lighting level**
- min. 100 foot-candles 2.1-2.8.8.1(2)(d)
- **Task lighting**
- **Duty station (light/sound signal)** Table 2.1-2

### Ventilation:
- **Min. 4 air changes per hour** Table 7.1
- **Duty station (light/sound signal)** Table 2.1-2
<table>
<thead>
<tr>
<th>Architectural Requirements</th>
<th>Building Systems Requirements</th>
</tr>
</thead>
</table>
| 2.2-3.3.5.8(9)  
___ Nourishment area  
___ provided in unrestricted patient care area | Ventilation:  
___ Min. 2 air changes per hour  
Table 7.1 |
| 2.1-2.8.9.2(1)  
___ handwashing station | Nurse Call System:  
___ Duty station (light/sound signal)  
2.1-8.5.1.2(3)(b) |
| 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) | | |
| 2.2-3.3.7.12  
(1)(a)  
___ Soiled workroom or soiled holding room (may be combined with Decontamination Room in Sterile Processing Facility) | | |
| (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  
___ soiled holding room | | |
| 2.1-2.8.12.3  
(1)  
___ handwashing station or hand sanitation station | | |

MDPH/DHCFLC  
12/19 IP14
Architectural 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

Building Systems Requirements

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

Patient toilet room

(a) Location:
   - directly accessible* to pre- & postoperative patient care area

   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

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
   - directly accessible* to 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

at least one hand scrub position for each cesarean delivery room, operating room & Class 3 imaging room

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)

placement of scrub station does not restrict min. required corridor width
### Architectural 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

### Building Systems Requirements

| 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

- ___ flushing-rim clinical sink or equivalent fixture
- __ or __ alternative methods for disposal of bio-waste
- ___ space for waste & soiled linen receptacles
- ___ documentation area
- ___ instrument air outlet for drying instruments
- __ or __ portable compressed air for drying instruments
- ___ storage for decontamination supplies & personal protective equipment (PPE)

#### (3) Clean workroom

- (a) ___ sized to accommodate sterilization equipment used
  - ___ equipment shown on plans
- (b) ___ work counter
- ___ handwashing station
- ___ storage for sterilization supplies
- ___ documentation area
- ___ instrument air outlet for drying instruments
- __ or __ portable compressed air for drying instruments
- ___ cooling area for sterilization cart
- □ check if not included in project

#### (4) Sterile storage (provided for storage of sterile instruments & supplies)

- (a) ___ area part of clean workroom
- __ or __ separate storage room
- (b) ___ space for case cart storage
- □ check if not included in project
- (only if case carts are not used)

2.1.5.1.2.3 ___ One-room sterile processing facility
- □ check if not included in project

#### (1) 

- ___ consists of decontamination area & clean work area
- (b) ___ two entrances
- __ or __ single entrance
- ___ located approximately equidistant from clean & decontamination sides of room
- ___ allows for one-way traffic flow

### Building Systems Requirements

Ventilation:

- ___ Min. 4 air changes per hour
- ___ Positive pressure
- □ No recirculating room units

Table 7.1
Architectural Requirements

(2)         
(a)        
(3)         
(a)        
(b)        
(c)        
(d)        

Building Systems Requirements

Ventilation:

(2)        
(a)        
(b)        
(c)        

Ventilation:

Ventilation:

2.1-5.1.2.4  
(1)        
(a)        
(b)        
(c)        

2.1-5.1.2.5  
(1)(a)     

Support Areas for Staff:

☐ check if not included in project
(only if case carts are not used in facility)
### Architectural Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)(b) Staff changing areas meet requirements</td>
<td></td>
</tr>
<tr>
<td>(1)(c) Staff changing areas meet requirements of unrestricted area</td>
<td></td>
</tr>
<tr>
<td>(2)(a) Lockers</td>
<td></td>
</tr>
<tr>
<td>(2)(b) Toilet room</td>
<td></td>
</tr>
<tr>
<td>(2)(c) Handwashing station</td>
<td></td>
</tr>
<tr>
<td>(2)(d) Space for donning surgical attire</td>
<td></td>
</tr>
<tr>
<td>(2)(e) Provision for separate storage of clean &amp; soiled work attire</td>
<td></td>
</tr>
</tbody>
</table>

### Building Systems Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventilation: Min. 10 air changes per hour</td>
<td></td>
</tr>
<tr>
<td>Exhaust</td>
<td></td>
</tr>
<tr>
<td>Negative pressure</td>
<td></td>
</tr>
<tr>
<td>No recirculating room units</td>
<td></td>
</tr>
</tbody>
</table>

### Support Areas Directly Accessible to Semi-Restricted Area

**2.2-3.3.7**

**2.2-3.3.7.12**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soiled workroom or soiled holding room</td>
<td></td>
</tr>
<tr>
<td>No direct connection with operating rooms or other sterile activity rooms</td>
<td></td>
</tr>
</tbody>
</table>

**2.1-2.8.12.2**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soiled workroom</td>
<td></td>
</tr>
<tr>
<td>Handwashing station</td>
<td></td>
</tr>
<tr>
<td>Flushing-rim clinical service sink with bedpan-rinsing device or equivalent</td>
<td></td>
</tr>
<tr>
<td>Work counter</td>
<td></td>
</tr>
<tr>
<td>Space for separate covered containers for waste &amp; soiled linen</td>
<td></td>
</tr>
<tr>
<td>Fluid management system is used</td>
<td></td>
</tr>
<tr>
<td>Electrical &amp; plumbing connections that meet manufacturer requirements</td>
<td></td>
</tr>
<tr>
<td>Space for docking station</td>
<td></td>
</tr>
</tbody>
</table>

**2.1-2.8.12.3**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soiled holding room</td>
<td></td>
</tr>
<tr>
<td>Handwashing station or hand sanitation station</td>
<td></td>
</tr>
<tr>
<td>Space for separate covered containers for waste &amp; soiled linen</td>
<td></td>
</tr>
<tr>
<td>Other provisions for disposal of liquid waste are provided and described</td>
<td></td>
</tr>
</tbody>
</table>

**2.2-3.3.7.12(3)**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean equipment &amp; supply storage for clean equipment &amp; supplies used in</td>
<td></td>
</tr>
<tr>
<td>semi-restricted &amp; restricted areas</td>
<td></td>
</tr>
<tr>
<td>General clean equipment &amp; supply room separate from &amp; have no direct</td>
<td></td>
</tr>
<tr>
<td>connection with soiled holding room</td>
<td></td>
</tr>
<tr>
<td>Min. 50 sf per operating room</td>
<td></td>
</tr>
<tr>
<td>Min. 300 sf</td>
<td></td>
</tr>
</tbody>
</table>

### Nurse Call System

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duty station (light/sound signal)</td>
<td></td>
</tr>
</tbody>
</table>

### Other Provisions

**2.2-3.3.7.13**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Compliance Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean equipment &amp; supply storage for clean equipment &amp; supplies used in</td>
<td></td>
</tr>
<tr>
<td>semi-restricted &amp; restricted areas</td>
<td></td>
</tr>
<tr>
<td>Min. 4 air changes per hour</td>
<td></td>
</tr>
<tr>
<td>Positive pressure</td>
<td></td>
</tr>
<tr>
<td>No recirculating room units</td>
<td></td>
</tr>
<tr>
<td>Architectural Requirements</td>
<td>Building Systems Requirements</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>2.2-3.3.8</strong></td>
<td></td>
</tr>
<tr>
<td><strong>OTHER SUPPORT AREAS IN SURGERY DEPARTMENT</strong></td>
<td></td>
</tr>
<tr>
<td>2.2-3.3.8.13(1)</td>
<td>____ Clean linen storage (may be in designated location in clean supply &amp; equipment storage room)</td>
</tr>
<tr>
<td>(3)</td>
<td>____ Storage space for gurneys, stretchers &amp; wheelchairs</td>
</tr>
<tr>
<td>(5)</td>
<td>____ Medical gas storage</td>
</tr>
<tr>
<td></td>
<td>____ space for supply &amp; storage of medical gases used in facility including space for reserve cylinders provided</td>
</tr>
<tr>
<td></td>
<td>____ protected in accordance with NFPA 99 Health Care Facilities Code</td>
</tr>
<tr>
<td>(6)</td>
<td>____ Storage for large clinical equipment</td>
</tr>
<tr>
<td></td>
<td>☐ check if not included in project</td>
</tr>
<tr>
<td><strong>2.2-3.3.8.16</strong></td>
<td>____ Storage for blood, organs, tissue &amp; pathological specimens</td>
</tr>
<tr>
<td>(1)</td>
<td>____ equipment temperature controls alarms &amp; monitoring</td>
</tr>
<tr>
<td><strong>2.1-4.1.2.3</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>____ Refrigerated storage facilities</td>
</tr>
<tr>
<td>(1)</td>
<td>____ refrigerator</td>
</tr>
<tr>
<td>(2)</td>
<td>____ blood storage facilities</td>
</tr>
<tr>
<td><strong>2.2-3.3.8.17</strong></td>
<td>____ Area for preparation &amp; examination of frozen sections</td>
</tr>
<tr>
<td></td>
<td>____ located in Surgical Department</td>
</tr>
<tr>
<td></td>
<td>or</td>
</tr>
<tr>
<td></td>
<td>____ located in general laboratory</td>
</tr>
<tr>
<td></td>
<td>____ immediate results are obtainable</td>
</tr>
<tr>
<td><strong>2.2-3.3.9</strong></td>
<td></td>
</tr>
<tr>
<td><strong>SUPPORT AREAS FOR SURGERY DEPARTMENT STAFF</strong></td>
<td></td>
</tr>
<tr>
<td>2.2-3.3.9.1</td>
<td>____ Staff lounge</td>
</tr>
<tr>
<td><strong>2.2-3.3.9.4</strong></td>
<td>____ Staff changing area &amp; toilet facilities</td>
</tr>
<tr>
<td>(1)</td>
<td>____ one or more private changing rooms or areas for male &amp; female staff working in semi-restricted &amp; restricted areas of surgery department</td>
</tr>
<tr>
<td>(2)(a)</td>
<td>____ lockers</td>
</tr>
<tr>
<td>(2)(b)</td>
<td>____ showers</td>
</tr>
<tr>
<td>(2)(c)</td>
<td>____ toilets</td>
</tr>
<tr>
<td></td>
<td>____ Ventilation:</td>
</tr>
<tr>
<td></td>
<td>____ Min. 10 air changes per hour</td>
</tr>
<tr>
<td></td>
<td>____ Exhaust</td>
</tr>
<tr>
<td></td>
<td>____ Negative pressure</td>
</tr>
<tr>
<td></td>
<td>____ No recirculating room units</td>
</tr>
<tr>
<td>(2)(d)</td>
<td>____ handwashing stations</td>
</tr>
<tr>
<td>(2)(e)</td>
<td>____ space for donning &amp; doffing surgical attire</td>
</tr>
<tr>
<td>(2)(f)</td>
<td>____ provisions for separate storage of clean &amp; soiled surgical attire</td>
</tr>
</tbody>
</table>
## Architectural Requirements

### SUPPORT AREAS FOR PATIENTS FAMILIES & VISITORS

#### 2.2-3.3.10

- **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

### Waiting area for families & visitors

#### 2.2-3.3.10.4


---

### Building Systems Requirements

**Ventilation:**

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

---

### Architectural Details & MEP Requirements

#### ARCHITECTURAL DETAILS

**CORRIDOR WIDTH:**

#### 2.1-7.2.2

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

#### 2.1-7.2.2.1

- 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

- Detailed code review incorporated in Project Narrative

#### CEILING HEIGHT:

- Min ceiling height 7'-6" in corridors & in normally unoccupied spaces

#### 2.1-7.2.2.2

- Min. height 7'-0" in radiography, procedure & operating rooms from floor to lowest protruding element of equipment or fixture in stowed position

#### 2.1-7.2.2.3

- 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

### DOORS & DOOR HARDWARE:

#### Door Type:

- ☐ doors between corridors, rooms, or spaces subject to occupancy swing type or sliding doors

- Sliding doors

- Detailed code review included in Project Narrative

- No floor tracks

#### Door Opening:

- Min. 45.5" clear door width for diagnostic/treatment areas

- Min. 83.5" clear door height for diagnostic/treatment areas

- Swinging doors for personnel use in addition to sliding doors

- Detailed code review included in Project Narrative

- 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
   (b) door that swings outward
   or
   (c) door equipped with emergency rescue hardware (permits quick access from outside the room to prevent blockage of the door)
   or
   (d) 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) 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

2.1-7.2.9 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

2.1-7.2.11 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

2.1-7.2.12 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

2.1-7.2.4 FURNISHINGS:
2.1-7.2.4.1 Built-in furnishings upholstered with impervious materials in patient treatment areas with risks of exposure & contamination from bodily fluids & other fluids
2.1-7.2.4.3 Privacy curtains in patient care areas are washable

2.1-8.2 HEATING VENTILATION & AIR-CONDITIONING (HVAC) SYSTEMS
UTILITIES:
Part 3/6.1 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

Part 3/6.1.2 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

Part 3/6.2 Central cooling systems greater than 400 tons (1407 kW) peak cooling load
- check if not included in project

Part 3/6.2.1 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:
- 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 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
- 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 3/6.4 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 3/6.5 HEATING & COOLING SYSTEMS:
- □ 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 3/6.6 ENERGY RECOVERY SYSTEMS:
- □ Located upstream of Filter Bank No. 2
- AII room exhaust systems or combination AII/PE rooms are not used for energy recovery
Part 3/6.3.3

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

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
☐ No anesthetic gases are administered

Part 3/8

...
## Electrical Systems

### Electrical Distribution & Transmission

- **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.

### Ground-Fault Circuit Interrupters in Critical Care Areas:

- Check if not included in project.
- Each receptacle individually protected by single GFCI device.

### Power-Generating & Storing Equipment

- Essential electrical system or emergency electrical power.
  1. Essential electrical system complies with NFPA 99.
  2. Emergency electrical power complies with NFPA 99.

### Electrical Equipment

- Handwashing sinks & scrub sinks that depend on building electrical service for operation are connected to essential electrical system.
- Electronic health record system servers & centralized storage provided with uninterruptible power supply.

### Electrical Receptacles

- Receptacles in Corridors:
  1. Duplex-grounded receptacles for general use installed 50'-0" apart or less in all corridors.
  2. Duplex-grounded receptacles for general use installed within 25'-0" of corridor ends.

- 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.

## Plumbing Systems

### Plumbing & Other Piping Systems:

- No plumbing piping exposed overhead or on walls where possible accumulation of dust or soil may create cleaning problem.

### Heated Potable Water Distribution Systems:

- Heated potable water distribution systems serving patient care areas are under constant recirculation.
- Non-recirculated fixture branch piping max. length 25'-0".
- No installation of dead-end piping (except for empty risers mains & branches for future use).
- Any existing dead-end piping is removed.
- Water-heating system supplies water at temperatures & amounts indicated in Table 2.1-4.

### Drainage Systems:

- Drainage piping installed above ceiling of or exposed in operating rooms, procedure rooms, sterile processing facilities, electronic data processing areas & electric closets.
- Special provisions to protect space below from leakage & condensation.
- Drip pan for drainage piping above ceiling of sensitive area.
- Overflow drain with outlet located in normally occupied area that is not open to restricted area.
- No floor drains in procedure rooms, operating rooms, Class 2 & Class 3 imaging rooms.
- Floor drain in dedicated cystoscopy procedure room.
- Recessed floor sink with automatic trap primer.
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
(3) sink basins have min. dimension 9 inches in width or length
(4) 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
(6) anchored so that allowable stresses are not exceeded where vertical or horizontal force of 250 lbs. is applied
(7) 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 are operated without hands (may be single-lever or wrist blade devices)
(a)
(b) handles are at least 6 in. long
(2) 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