COMPLIANCE CHECKLIST

IP16_Class 1 Imaging Services

The following checklist is intended to be used in plan review applications for health care facilities submitted to Massachusetts Department of Public Health This checklist summarizes & references applicable requirements from Licensure Regulations & 2022 Edition of FGI Guidelines for Design & Construction of Hospitals Applicants must verify compliance of plans submitted to Department with all referenced requirements from Licensure Regulations & FGI Guidelines when completing this Checklist separate Checklist must be completed for each nursing unit hospital or clinic department or clinical suite

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

- NFPA 101 Life Safety Code (2012) & applicable related standards contained in appendices of Code
- State Building Code (780 CMR)
- Accreditation requirements of Joint Commission
- CDC Guidelines for Preventing Transmission of Mycobacterium Tuberculosis in Health Care Facilities
- USP 797 & Regulations of Massachusetts Board of Registration in Pharmacy
- Occupational Safety & Health Standards (OSHA)
- Accessibility Guidelines of 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 following instructions & included in plan submissions for Self-Certification Process or Abbreviated Review Process
2. This checklist must be completed by project architect or engineer based on design actually reflected in plans at time of completion of checklist
3. Each requirement line (___) of this Checklist must be completed exclusively with one of following marks unless otherwise directed in checklist If functional space is not affected by renovation project mark “E” may be indicated on requirement line (___) before name of 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 given required function (e.g patient room or exam room) that clarification should be provided in Project Narrative & requirement lines are understood to only address functional spaces that are involved in project

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

E = Requirement relative to existing suite or area that has been *licensed* for its designated function is *not affected* by construction project & *does not pertain to required direct support space* for specific service affected by project “E” must not be used for existing required support space associated with new patient care room or area

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

W = Waiver requested for specific section of Regulations or FGI Guidelines where hardship in meeting requirement can be demonstrated (a Physical Plant Waiver Form must be completed for each waiver request) explicit floor plan or plan detail must be attached to each waiver request

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

2.2-3.5 **CLASS 1 IMAGING SERVICES**

2.2-3.5.1.2 Imaging Room
2.2-3.5.2.1(1) ___ X-ray fluoroscopy mammography CT scanner ultrasound MRI & other imaging modalities that may use natural orifice entry & do not pierce or penetrate natural protective membranes
Table 2.2-2 ___ room is unrestricted area
___ accessed from unrestricted area

2.2-3.5.3 **COMPUTED TOMOGRAPHY (CT) FACILITIES**
☐ check if not included in project

2.2-3.5.2.1(1) Flooring:
Table 2.2-2 ___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

2.2-3.5.2.3(1) ___ handwashing station

Ventilation:
___ Min 6 air changes per hour Table 7-1
Power:
___ Min 8 receptacles in total Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry
Nurse Call System:
___ Emergency call station Table 2.1-2
Medical Gases: Table 2.1-3
___ 1 OX 1 VAC

2.2-3.5.1.2 Radiation Protection:
___ certified radiation physicist representing owner has specified type location & amount of radiation protection to be installed in accordance with layout & equipment selections
___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

2.2-3.5.1.2(1) ___ shielded control alcove or room
(a) ___ control room or alcove is at min sized & configured in compliance with manufacturer's recommendations for installation service & maintenance

(b) Shared control room or alcove
☐ check if not included in project
___ control room or alcove permitted to serve more than one imaging room provided manufacturer's recommendations for installation service & maintenance are accommodated for all rooms served
___ means provided to prevent patient in one imaging room from viewing patient in another imaging room

Architectural Requirements **Building Systems Requirements**

(c) ___ shielded view window
___ designed to provide full view of exam table & patient at all times
___ full view of patient during imaging activities through direct line of sight or use of closed-circuit video monitoring

2.2-3.5.2.2 Space requirements
(1) ___ clearances
(a) ___ manufacturer's recommended clearances for installation service & maintenance be provided
___ installation plans from manufacturer have been submitted to DPH Plan Review
___ min clearance 5'-0" on at least one designated patient transfer side of patient table
(b) ___ min clearance 3'-0" on all sides of freestanding imaging device including patient table gantry or assembly

2.2-3.5.2.4(1)(d) Structural Support:
___ floor & if applicable ceiling structures in imaging rooms designed to support weight of imaging equipment as well as other fixed & movable ancillary equipment

2.2-3.5.2.5 ___ System component room
☐ check if <u>not</u> included in project
(1) Location:
(a) ___ opens into imaging room
or
___ open into space outside imaging room

(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

	Architectural Requirements	Building Systems Requirements

2.2-3.5.4.2 **RADIOGRAPHY (X_RAY) ROOM**
☐ check if not included in project

2.2-3.5.2.1(1)
Table 2.2-2
Flooring:
___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

2.2-3.5.2.3(1)
___ handwashing station

Ventilation:
___ Min 6 air changes per hour — Table 7-1
Power:
___ Min 8 receptacles in total — Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry
Nurse Call System:
___ Emergency call station — Table 2.1-2
Medical Gases: — Table 2.1-3
___ 1 OX 1 VAC

2.2-3.5.1.2
Radiation Protection:
___ certified radiation physicist representing owner has specified type location & amount of radiation protection to be installed in accordance with layout & equipment selections
___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

2.2-3.5.1.2(1)
___ shielded control alcove or room

(a)
___ control room or alcove is at min sized & configured in compliance with manufacturer's recommendations for installation service & maintenance

(b)
Shared control room or alcove
☐ check if not included in project
___ control room or alcove permitted to serve more than one imaging room provided manufacturer's recommendations for installation service & maintenance are accommodated for all rooms served
___ means provided to prevent patient in one imaging room from viewing patient in another imaging room

(c)
___ shielded view window
___ designed to provide full view of exam table & patient at all times
___ full view of patient during imaging activities through direct line of sight or use of closed-circuit video monitoring

2.2-3.5.2.2
Space requirements
(1)
___ clearances
(a)
___ manufacturer's recommended clearances for installation service & maintenance be provided

Architectural Requirements **Building Systems Requirements**

___ installation plans from manufacturer have been submitted to DPH Plan Review

___ min clearance 5'-0" on at least one designated patient transfer side of patient table

(b)

___ min clearance 3'-0" on all sides of freestanding imaging device including patient table gantry or assembly

2.2-3.5.2.4(1)(d) Structural Support:

___ floor & if applicable ceiling structures in imaging rooms designed to support weight of imaging equipment as well as other fixed & movable ancillary equipment

2.2-3.5.2.5 ___ System component room

☐ check if not included in project

(1) Location:

(a) ___ opens into imaging room

or

___ opens into space outside imaging room

(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

2.2-3.5.4.3 **FLUOROSCOPY ROOM**

☐ check if not included in project

2.2-3.5.2.1(1) Flooring:

Table 2.2-2 ___ cleanable & wear-resistant for location; stable firm & slip-resistant

Wall Finishes:

___ washable

Ceiling:

___ cleanable with routine housekeeping equipment

2.2-3.5.2.3(1) ___ handwashing station

Ventilation:	
___ Min 6 air changes per hour	Table 7-1
Power:	
___ Min 8 receptacles in total	Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry	
Nurse Call System:	
___ Emergency call station	Table 2.1-2
Medical Gases:	Table 2.1-3
___ 1 OX 1 VAC	

2.2-3.4.4.3(1) ___ Separate toilet room

___ handwashing station

___ directly accessible* from each dedicated Class 1 fluoroscopy room or combination radiography/fluoroscopy

Architectural Requirements **Building Systems Requirements**

room
___ patients are able to leave toilet room without reentering fluoroscopy room

2.2-3.5.1.2 Radiation Protection:
☐ check if not included in project
(only if imaging equipment does not emit ionizing radiation)
___ certified radiation physicist representing owner has specified type location & amount of radiation protection to be installed in accordance with layout & equipment selections
___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

2.2-3.5.1.2(1) ___ shielded control alcove or room
☐ check if not included in project
(only if radiation-emitting imaging equipment is portable)

(a) ___ control room or alcove is at min sized & configured in compliance with manufacturer's recommendations for installation service & maintenance

(b) Shared control room or alcove
☐ check if not included in project
___ control room or alcove permitted to serve more than one imaging room provided manufacturer's recommendations for installation service & maintenance are accommodated for all rooms served
___ means provided to prevent patient in one imaging room from viewing patient in another imaging room

(c) ___ shielded view window
___ designed to provide full view of exam table & patient at all times
___ full view of patient during imaging activities through direct line of sight or use of closed-circuit video monitoring

2.2-3.5.2.2 Space requirements
(1) ___ clearances
(a) ___ manufacturer's recommended clearances for installation service & maintenance be provided
___ installation plans from manufacturer have been submitted to DPH Plan Review

Architectural Requirements **Building Systems Requirements**

___ min clearance 5'-0" on at least one designated patient transfer side of patient table

(b) ___ min clearance 3'-0" on all sides of freestanding imaging device including patient table gantry or assembly

2.2-3.5.2.4(1)(d) Structural Support:
___ floor & if applicable ceiling structures in imaging rooms designed to support weight of imaging equipment as well as other fixed & movable ancillary equipment

2.2-3.5.2.5 ___ System component room
☐ check if not included in project
(1) Location:
(a) ___ opens into imaging room
or
___ open into space outside imaging room

(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

2.2-3.5.4.4 **MAMMOGRAPHY ROOM**
☐ check if not included in project

2.2-3.5.2.1(1) Table 2.2-2 Flooring:
___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

Ventilation:	
___ Min 6 air changes per hour	Table 7-1
Power:	
___ Min 8 receptacles in total	Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry	
Nurse Call System:	
___ Emergency call station	Table 2.1-2
Medical Gases:	Table 2.1-3
___ 1 OX 1 VAC	

2.2-3.5.4.4(1) Space Requirements:
(a) ___ min clearance 3'-0" on all circulating sides of patient position

2.2-3.5.4.4(2) Visual Privacy:
___ means to prevent views into mammography room by public or other patients

2.2-3.5.4.4(3) ___ Handwashing station

Architectural Requirements **Building Systems Requirements**

2.2-3.5.4.4(4) ___ Changing rooms for mammography patients
☐ check if not included in project (only if appropriate area for changing is provided in each mammography room)
___ immediately accessible* to waiting area
___ immediately accessible* to imaging rooms
2.2-3.5.10.3(2) ___ each room includes seat or bench & mirror
2.2-3.5.10.3(3) ___ provisions for hanging patient clothing & securing valuables located either in patient changing room or in shared secured storage

2.2-3.5.1.2 Radiation Protection:
___ certified radiation physicist representing owner has specified type location & amount of radiation protection to be installed in accordance with layout & equipment selections
___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

BONE DENSITOMETRY ROOM
☐ check if not included in project

2.2-3.5.2.1(1) Table 2.2-2 Flooring:
___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

2.2-3.5.2.3(1) ___ handwashing station

Ventilation:
___ Min 6 air changes per hour Table 7-1
Power:
___ Min 8 receptacles in total Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry
Nurse Call System:
___ Emergency call station Table 2.1-2
Medical Gases: Table 2.1-3
___ 1 OX 1 VAC

2.2-3.5.1.2 Radiation Protection:
___ certified radiation physicist representing owner has specified type location & amount of radiation protection to be installed in accordance with layout & equipment selections
___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

2.2-3.5.5 **MAGNETIC RESONANCE IMAGING (MRI) FACILITIES**
☐ check if not included in project

2.2-3.5.5.1 Configuration of MRI suite
___ suite for MRI equipment with static magnetic field of 9 gauss that is contained within MRI scanner device
(1) ___ MRI suite conforms with manufacturer's siting guidance
(2) **or**
___ suite for MRI equipment with static

Architectural Requirements **Building Systems Requirements**

magnetic field of 9 gauss that extends beyond MRI scanner device conforms to four-zone screening & access control protocols identified in current edition of "ACR Manual on MR Safety" (as noted below)

(a) Static magnetic field of 9 gauss extends beyond MRI scanner device

☐ check if not included in project

___ **Zone IV**: Located within MR Controlled Access Area & MR Environment In most cases it uniquely includes MR Projectile Area

___ "Magnet is Always On" signage must be visible under all conditions for superconducting systems

___ zone IV MR system room door will be closed at all times except for patient transport

___ **Zone III**: Located within MR Controlled Access Area (9-gauss line may extend outside Zone IV into Zone III control room areas or adjacent equipment rooms)

___ **Zone II**: Interface between publicly accessible uncontrolled Zone I & MR Controlled Access Area

___ typically includes patient waiting changing nursing preparation area patient screening including ferromagnetic detection

___ **Zone I**: Freely accessible to general public

(c) Support Areas for MRI Suite

___ space for patient interviews & physical & clinical screening separate from MRI scanner room

___ patient code treatment/resuscitation area

___ adjacent to MRI scanner room

___ ferromagnetic (only) detection & warning systems

___ access controls

___ space for containment of non-MRI-safe objects outside restricted MRI safety zones

___ space for storage (patient lockers) of patient belongings & non-MRI-safe items

(d) ___ any area in which magnetic field strength is equal to or greater than 9 gauss is physically restricted by use of key locks or pass-key locking systems

Architectural Requirements **Building Systems Requirements**

2.2-3.5.5.2 ___ MRI scanner room

2.2-3.5.2.1(1) Flooring:
Table 2.2-2 ___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

Ventilation:
___ Min 6 air changes per hour Table 7-1
Power:
___ Min 8 receptacles in total Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry
Nurse Call System:
___ Emergency call station Table 2.1-2
Medical Gases: Table 2.1-3
___ 1 OX 1 VAC

2.2-3.5.5.2(2) ___ handwashing station
(b) ___ location of handwashing station in MRI scanner room
or
___ location of handwashing station directly outside entrance to MRI scanner room

2.2-3.5.2.2 Space requirements
(1) ___ clearances
(a) ___ manufacturer's recommended clearances for installation service & maintenance be provided
___ installation plans from manufacturer have been submitted to DPH Plan Review
___ min clearance 5'-0" on at least one designated patient transfer side of patient table
(b) ___ min clearance 3'-0" on all sides of freestanding imaging device including patient table gantry or assembly

2.2-3.5.2.4(1)(d) Structural Support:
___ floor & if applicable ceiling structures in imaging rooms designed to support weight of imaging equipment as well as other fixed & movable ancillary equipment

2.2-3.5.5.4 ___ MRI control room
☐ check if not included in project
(only if control room is not required by MRI device manufacturer)

(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

2.2-3.5.1.3(1) Space Requirements:
(a) ___ sized & configured according to manufacturer's recommendations

Superconducting MRI cryogen venting: 2.2-3.5.5.3
___ Cryogen vent (quench) pipe is provided in accordance with equipment manufacturer's technical specifications (for MRI equipment protection) (1)
Cryogen venting points of discharge:
___ clearly marked & shielded from staff & maintenance personnel areas (a)
___ substantially removed from all public & patient routes of travel
___ minimum clearances from air intakes operable windows or doors as defined by MRI system manufacturer (b)
___ designed with weather head sufficient to protect against horizontally driven rain (c)
___ Accessible areas around cryogen vent discharge marked to indicate safety exclusion zone in accordance with MRI equipment manufacturer standards (d)
___ Emergency exhaust & passive pressure relief provided in accordance with equipment manufacturer's technical specifications for building occupant protection (2)

	Architectural Requirements	Building Systems Requirements
2.2-3.5.1.3(1)(c)	___ view window designed to provide full view of patient at all times (use of additional closed-circuit video monitoring permitted)	
2.2-3.5.5.5	___ Entry vestibule ☐ check if not included in project	
(3)	(only if 5-gauss volume does not extend beyond MRI device)	
(1)	___ located outside MRI scanner room so that patients health care personnel & other employees must pass through it before entering MRI scanner room	
(2)	___ entry vestibule is part of MRI control room **or** ___ entry vestibule directly visible from control room	
2.2-3.5.5.6 2.2-3.5.2.5	___ System component room	
(1)	Location:	
(a)	___ opens into imaging room **or** ___ open into space outside imaging room	
(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	
2.2-3.5.5.7	Special design elements for MRI scanner room	
(1)	Architectural details	
(a)	___ ferromagnetic materials that may become detached or otherwise interfere with operation of MRI scanner are not used in MRI scanner rooms	
(b)	___ radiofrequency (RF) shielding provided for clinical MRI installations to attenuate stray radio frequencies that could interfere with MRI imaging process	
(c)	___ MRI scanner room located and/or shielded to avoid electromagnetic interference from elevators or other electromagnetic equipment	
(d)	___ need for magnetic shielding has been assessed by certified physicist experienced in magnetic shielding design	
(e)	___ acoustic control provided to mitigate noise emitted by MRI scanner	

	Architectural Requirements	Building Systems Requirements
(2)	Structural details	
(a)	___ floor structure designed to support weight of MRI scanner equipment ___ floor structure designed minimize disturbance to MRI magnetic field ___ floor structure designed to mitigate disruptive environmental vibrations	
(b)	___ structural designs keep ferrous content at or below MRI manufacturer requirements based on mass & proximity to MRI scanner	
(3)	Electrical details	
(a)	___ power conditioning and/or uninterruptible power supplies provided as indicated by MRI manufacturer's power requirements & specific facility conditions	
(b)	___ MRI rooms marked with lighted sign with red light to indicate that magnet is in operation	
2.2-3.5.6	**ULTRASOUND FACILITIES** ☐ check if not included in project	
	___ Ultrasound room	
2.2-3.5.6.1	Space Requirements:	
(1)(a)	___ min clearance 3'-0" on all circulating sides of patient table or procedural chair	
(2)	___ handwashing station	
2.2-3.5.2.1(1) Table 2.2-2	Flooring: ___ cleanable & wear-resistant for location; stable firm & slip-resistant Wall Finishes: ___ washable Ceiling: ___ cleanable with routine housekeeping equipment	Ventilation: ___ Min 6 air changes per hour — Table 7-1 Power: ___ Min 8 receptacles in total — Table 2.1-1 ___ Min 4 receptacles on each lateral side of imaging gantry Nurse Call System: ___ Emergency call station — Table 2.1-2 Medical Gases: — Table 2.1-3 ___ 1 OX 1 VAC
2.2-3.5.2.3(1)	___ handwashing station	
2.2-3.5.6.2	___ Patient toilet room	
2.2-3.5.10.2(2) (a)	___ directly accessible* from imaging room	
2.2-3.5.10.2(2)	___ each toilet room serves one ultrasound room only **or**	Ventilation: ___ Min 10 air changes per hour — Table 7-1 ___ Exhaust ___ Negative pressure ___ No recirculating room units
(b)	___ patient toilet room serves more than one ultrasound room	
(c)	___ shared toilet rooms have interlocking door access hardware	

	Architectural Requirements	Building Systems Requirements	
2.2-3.5.8.19	Facilities for Processing Ultrasound Probes: ☐ check if not included in project (only if all ultrasound probes are disinfected in central sterile processing area)		
(1)	___ dedicated ultrasound probe processing room or area (may serve multiple ultrasound exam rooms)		
(c)	___ processing room allows for flow of ultrasound probes from decontamination area to clean area & then to storage		
(d)	___ decontamination area ___ work counter ___ instrument-washing sink appropriate to method of decontamination used ___ handwashing station ___ space & utility connections to support high-level disinfection process & equipment used	Ventilation: ___ Min 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
	or		
(2)	___ ultrasound probes processed at point of use or in separate area using automated high-level disinfection unit specifically designed for ultrasound probes		
(a)	___ space for disinfection device with access to electrical receptacle		
(b)	___ access to soiled workroom in same clinical area to support probe decontamination when necessary ___ soiled workroom equipped with instrument-washing sink		
(3)	___ clean ultrasound probe storage		
2.2-3.5.7	**NUCLEAR/MOLECULAR IMAGING SERVICES** ☐ check if not included in project		
2.2-3.5.7.1(3)	___ Exercise area or room ☐ check if not included in project		
(a)	___ exercise equipment (e.g stationary bicycle treadmill) Clearance is provided for patient & caregiver access to equipment on primary access side & on one adjacent side		
	or		
	___ space for exercise equipment in separate room directly accessible* to imaging room		
(b)	___ staff work space in imaging room		
	or		
	___ staff work space in separate room directly accessible* to imaging room		

Architectural Requirements **Building Systems Requirements**

2.2-3.5.7.1(4) ___ Handwashing stations
- ___ provided throughout nuclear imaging suite at locations of patient contact
- ___ provided throughout nuclear imaging suite at locations where radiopharmaceutical materials are handled prepared or disposed

2.2-3.5.7.1(5) ___ Nuclear imaging dose administration area
(a) ___ located near preparation area
(b) ___ provisions for visual privacy from other areas

2.2-3.5.7.2 ___ Scintigraphy (gamma camera) rooms
☐ check if not included in project

2.2-3.5.2.1(1) Flooring:
Table 2.2-2 ___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

2.2-3.5.2.3(1) ___ handwashing station

Ventilation:
___ Min 6 air changes per hour Table 7-1
Power:
___ Min 8 receptacles in total Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry
Nurse Call System:
___ Emergency call station Table 2.1-2
Medical Gases: Table 2.1-3
___ 1 OX 1 VAC

2.2-3.5.1.2 Radiation Protection:
- ___ certified radiation physicist representing owner has specified type location & amount of radiation protection to be installed in accordance with layout & equipment selections
- ___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

2.2-3.5.1.2(1) ___ shielded control alcove or room
(a)
- ___ control room or alcove is at min sized & configured in compliance with manufacturer's recommendations for installation service & maintenance

(b) Shared control room or alcove
☐ check if not included in project
- ___ control room or alcove permitted to serve more than one imaging room provided manufacturer's recommendations for installation service & maintenance are accommodated for all rooms served
- ___ means provided to prevent patient in one imaging room from viewing patient in another imaging room

	Architectural Requirements	Building Systems Requirements
(c)	___ shielded view window ___ designed to provide full view of exam table & patient at all times ___ full view of patient during imaging activities through direct line of sight or use of closed-circuit video monitoring	
2.2-3.5.2.2	Space requirements: ___ clearances	
(1)(a)	___ manufacturer's recommended clearances for installation service & maintenance be provided ___ installation plans from manufacturer have been submitted to DPH Plan Review ___ min clearance 5'-0" on at least one designated patient transfer side of patient table	
(1)(b)	___ min clearance 3'-0" on all sides of freestanding imaging device including patient table gantry or assembly	
2.2-3.5.2.4(1)(d)	Structural Support: ___ floor & if applicable ceiling structures in imaging rooms designed to support weight of imaging equipment as well as other fixed & movable ancillary equipment	
2.2-3.5.2.5	___ System component room ☐ check if <u>not</u> included in project	
(1)	Location:	
(a)	___ opens into imaging room **or** ___ open into space outside imaging room	
(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	

Architectural Requirements **Building Systems Requirements**

2.2-3.5.7.3 ___ Positron emission tomography suite (PET)
☐ check if not included in project

(1) PET Suite Configuration:

(a) ___ PET suites designed & positioned in facility to restrict incidental exposure to ionizing radiation sources by persons not immediately involved in PET examination

(b) ___ certified radiation physicist has determined required extent of radiation shielding at radio-pharmacy, hot lab, scanner room patient holding & other spaces

___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

(2) ___ PET scanner room
☐ check if not included in project

2.2-3.5.3.1 ___ PET scanner room meets above requirements for Class 1 imaging rooms

or

___ PET scanner room meets above requirements for Class 2 imaging rooms

or

___ PET scanner room meets above requirements for Class 3 imaging rooms

Flooring:
___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

2.2-3.5.2.3(1) ___ handwashing station

Ventilation:
___ Min 6 air changes per hour Table 7-1
Power:
___ Min 8 receptacles in total Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry
Nurse Call System:
___ Emergency call station Table 2.1-2
Medical Gases: Table 2.1-3
___ 1 OX 1 VAC

2.2-3.5.2.2 Space requirements:

(1)

(a) ___ manufacturer's recommended clearances for installation service & maintenance be provided

___ installation plans from manufacturer have been submitted to DPH Plan Review

___ min clearance 5'-0" on at least one designated patient transfer side of patient table

(b)

___ min clearance 3'-0" on all sides of freestanding imaging device including patient table gantry or assembly

Architectural Requirements **Building Systems Requirements**

2.2-3.5.2.4(1)(d) Structural Support:
___ floor & if applicable ceiling structures in imaging rooms designed to support weight of imaging equipment as well as other fixed & movable ancillary equipment

2.2-3.5.3.3
2.2-3.5.2.5 ___ System component room
☐ check if not included in project
(1) Location:
(a) ___ opens into imaging room
or
___ open into space outside imaging room

(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

2.2-3.5.7.3(6) ___ Cyclotron room
☐ check if not included in project (only if radiopharmaceuticals are provided by commercial sources)
(a) ___ located in access-restricted areas
(b) ___ shielding requirements coordinated between equipment manufacturer & reviewing medical physicist
___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

(c) ___ handwashing station

2.2-3.5.7.3(7) ___ Patient uptake/cool-down room
___ radiation shielding provided for patient uptake/cool-down
2.2-3.5.7.3(7)(b) ___ configured & appointed to minimize patient movement during radiopharmaceutical uptake period

___ dedicated patient uptake/cool-down room
or
2.2-3.5.7.1(5)(d) ___ combined with Nuclear Imaging Dose Administration Area

2.2-3.5.7.3(7)(c) ___ Toilet room with handwashing station & dedicated “hot” toilet to accommodate radioactive waste
___ directly accessible* or adjacent* to uptake/cool-down room

Architectural Requirements

2.2-3.5.7.4 ___ Single-photon emission computed tomography room (SPECT)
☐ check if not included in project

2.2-3.5.3.1 Flooring:
___ cleanable & wear-resistant for location; stable firm & slip-resistant
Wall Finishes:
___ washable
Ceiling:
___ cleanable with routine housekeeping equipment

2.2-3.5.2.3(1) ___ handwashing station

2.2-3.5.1.2 Radiation Protection:
☐ check if not included in project
(only if imaging equipment does not emit ionizing radiation)
___ certified radiation physicist representing owner has specified type, location & amount of radiation protection to be installed based on layout & equipment
___ specifications of radiation shielding have been submitted to DPH Radiation Control Program

2.2-3.5.1.2(1) ___ shielded control alcove or room
(a) ___ control room or alcove is at min sized & configured in compliance with manufacturer's recommendations for installation service & maintenance

(b) Shared control room or alcove
☐ check if not included in project
___ control room or alcove permitted to serve more than one imaging room provided manufacturer's recommendations for installation service & maintenance are accommodated for all rooms served
___ means provided to prevent patient in one imaging room from viewing patient in another imaging room

(c) ___ shielded view window
___ designed to provide full view of exam table & patient at all times
___ full view of patient during imaging activities through direct line of sight or use of closed-circuit video monitoring

Building Systems Requirements

Ventilation:	
___ Min 6 air changes per hour	Table 7-1
Power:	
___ Min 8 receptacles in total	Table 2.1-1
___ Min 4 receptacles on each lateral side of imaging gantry	
Nurse Call System:	
___ Emergency call station	Table 2.1-2
Medical Gases:	Table 2.1-3
___ 1 OX 1 VAC	

Architectural Requirements **Building Systems Requirements**

2.2-3.5.2.2 Space requirements:
(1)
(a) ___ manufacturer's recommended clearances for installation service & maintenance be provided
___ installation plans from manufacturer have been submitted to DPH Plan Review
___ min clearance 5'-0" on at least one designated patient transfer side of patient table
(b) ___ min clearance 3'-0" on all sides of freestanding imaging device including patient table gantry or assembly

2.2-3.5.2.4(1)(d) Structural Support:
___ floor & if applicable ceiling structures in imaging rooms designed to support weight of imaging equipment as well as other fixed & movable ancillary equipment

2.2-3.5.3.3
2.2-3.5.2.5 ___ System component room
☐ check if not included in project
(1) Location:
(a) ___ opens into imaging room
or
___ open into space outside imaging room

(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

2.2-3.5.2.6 ___ Multiple-modality devices (e.g., PET/CT SPECT/CT or PET/MRI)
___ minimum design requirements for that room include design criteria for each individual contributing modality

2.2-3.5.8.15(1) **PRE- & POST-PROCEDURE PATIENT CARE AREA FOR CLASS 1 IMAGING ROOMS:**

(1) ___ Min one patient care station provided for every three Class 1 imaging rooms or fraction thereof (for point-of-care lab work or injection preparation with non-radiopharmaceutical contrast agents)

	Architectural Requirements	Building Systems Requirements	
2.2-3.5.8	**SUPPORT AREAS FOR IMAGING SERVICES** (may be shared between different imaging modalities)		
2.2-3.5.8.2	___ Reception area with control desk		
2.2-3.5.8.3	___ Documentation area		
2.1-2.8.3.1	___ work surface to support documentation process		
2.2-3.5.8.4	___ Consultation area		
	___ for consultation with patients or referring clinician (including remote consultation)		
2.2-3.5.8.8(1)	___ Medication safety zone & storage		
	___ immediately accessible* from pre- & post-procedure patient care areas		
2.2-3.5.8.8(2)	___ provision for locked storage of medications		
2.1-2.8.8.1(2)	Design Promoting Safe Medication Use:		
(a)	___ medication safety zones located out of circulation paths		
(b)	___ work space designed so that staff can access information & perform required tasks	Lighting: ___ Task-specific lighting level min 100 foot-candles	2.1-2.8.8.1(2) (d)
(c)	___ work counters provide space to perform required tasks		
(e)	___ sharps containers placed at height that allows users to see top of container		
(f)	___ max 45 dBA noise level caused by building systems		
2.1-2.8.8.2(1)	___ medication preparation room		
(a)	___ under visual control of nursing staff	Ventilation:	
(b)	___ work counter	___ Min 4 air changes per hour	Table 7-1
	___ handwashing station	Lighting:	
	___ lockable refrigerator	___ Task lighting	2.1-2.8.8.1(2)(d)
	___ locked storage for controlled drugs		
	___ sharps containers		
	☐ check if not included in project		
(c)	___ self-contained medication-dispensing unit		
	☐ check if not included in project		
	___ room designed with space to prepare medications		
	or		
2.1-2.8.8.2(2)	___ automated medication-dispensing unit		
(a)	___ located at nurse station in clean workroom or in alcove	Lighting: ___ Task lighting	2.1-2.8.8.1(2)(d)
(c)	___ handwashing station located next to stationary medication-dispensing units or stations		

	Architectural Requirements	Building Systems Requirements	
2.2-3.5.8.11 (2) (1)	___ Clean workroom or clean supply room (may be shared with another department) ___ readily accessible* to imaging rooms		
2.1-2.8.11.2	___ clean workroom	Ventilation:	
	___ used for preparing patient care items	___ Min 4 air changes per hour	Table 7-1
(1)	___ work counter	___ Positive pressure	
(2)	___ handwashing station		
(3)	___ storage facilities for clean & sterile supplies		
	or		
2.1-2.8.11.3	___ clean supply room	Ventilation:	
	___ used only for storage & holding as part of system for distribution of clean & sterile supplies	___ Min 4 air changes per hour ___ Positive pressure	Table 7-1
2.2-3.5.8.12	Soil workroom or soiled holding room (may be shared with another department)		
2.1-2.8.12.2	___ soiled workroom	Ventilation:	
		___ Min 10 air changes per hour	Table 7-1
(1)(a)	___ handwashing station	___ Exhaust	
(1)(b)	___ flushing-rim clinical service sink with bedpan-rinsing device or equivalent flushing-rim fixture	___ Negative pressure ___ No recirculating room units	
(1)(c)	___ work counter		
(1)(d)	___ space for separate covered containers for waste & soiled linen		
(2)	___ fluid management system is used ☐ check if <u>not</u> 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	Ventilation:	
		___ Min 10 air changes per hour	Table 7-1
(1)	___ handwashing station or hand sanitation station	___ Exhaust ___ Negative pressure	
(2)	___ space for separate covered containers for waste & soiled linen	___ No recirculating room units	
2.2-3.5.8.12(2)	___ Hot soiled holding ☐ check if <u>not</u> included in project (only if Nuclear Imaging is not involved or if written statement from medical physicist is provided)		
(a)	___ provided in soiled workroom or soiled holding room ___ separate from other waste holding areas		
2.2-3.5.8.13(1)	___ Clean linen storage ___ storage area for clean linen		

	Architectural Requirements	Building Systems Requirements	
2.2-3.5.8.13(3)	___ Mobile storage units used in lieu of fixed cabinets ☐ check if not included in project ___ placement of storage units does not encroach on clear floor area in imaging room or clearances needed for equipment used		
2.2-3.5.8.14 (2) (1) 2.1-2.8.14.2 (1)	___ Environmental services room (may be shared with other departments) ___ immediate access to imaging suite ___ service sink or floor-mounted mop sink	Ventilation:	
(2)	___ provisions for storage of supplies & housekeeping equipment	___ Min 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
(3)	___ handwashing station **or** ___ hand sanitation station		
2.2-3.5.8.16 (3)(4)	___ Contrast media preparation area (may serve multiple imaging rooms & is permitted to be part of medication preparation area) ☐ check if not included in project		
(1)(a) & (b) (2)	___ sink & counter ☐ check if not included in project (only if prepared media are used)		
(c)	___ storage to accommodate preparation of contrast media		
(d)	___ secure lockable storage		
2.2-3.5.8.17(1) (2)	___ Image management system ___ location of digital image management system on-site **or** ___ location of digital image management system off-site		
2.1-6.3.5 2.1-6.3.5.1	Location ___ to maintain confidentiality of records digital image management system area is restricted to staff access		
2.1-6.3.5.2 (1)	Space requirements ___ space is provided for digital image management system		
(2)	___ physical space requirements for electronic storage is coordinated with electronic medical records personnel from facility		

	Architectural Requirements	Building Systems Requirements	
2.2-3.5.8.18	___ Image interpretation/reading rooms		
(1)	___ remote location of image interpretation/ reading areas be permitted provided radiologists are immediately available when interventional imaging procedures are performed		
	or		
(2)	___ on-site location of image interpretation/ reading areas		
(a)	___ adjustable ambient lighting with minimal glare projected onto computer monitors		
	___ higher level of illumination for room maintenance (activated separately from ambient reading lighting)		
	___ workstation task lighting for writing or reading hard copy		
(b)	___ acoustic control		
	___ materials finishes & sound masking minimize disruption from conversational speaking dictation & surrounding noise		
2.2-3.5.8.21	___ Radiopharmaceutical production pharmacy ☐ check if not included in project		
	___ radiopharmacy provided with appropriate shielding		
(1)	Space Requirements:		
(a)	___ space provided for dose calibration quality assurance & record-keeping activities	Ventilation: ___ Hoods for pharmaceutical preparation meet applicable standards	2.2-3.4.8.21 (3)
(b)	___ space for storage of radionuclides chemicals for preparation dose calibrators & records		
(2)	___ floors & walls be constructed of easily decontaminated materials		
2.2-3.5.8.22	___ Hot lab for nuclear/molecular imaging services ☐ check if not included in project		
	___ securable area or room for storage & dosage of radiopharmaceuticals		
(2)	___ hot lab shielded according to manufacturer's technical specifications	Ventilation: ___ Min 6 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
	___ manufacturer's technical specifications have been submitted to DPH Plan Review		
(3)(a)	___ source storage area		
(3)(b)	___ dose storage area		
(3)(c)	___ storage area for syringe shields		
(3)(d)	___ emergency eyewash & shower		

	Architectural Requirements	Building Systems Requirements	
2.2-3.5.9	**SUPPORT AREAS FOR IMAGING SERVICES STAFF**		
2.2-3.5.9.1	___ Staff lounge		
(1)	___ readily accessible* to imaging suite		
(2)	___ Provisions for securing staff belongings		
2.2-3.5.9.2	___ Staff toilet room		
(1)	___ adjacent* to staff lounge	Ventilation: ___ Min 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
(2)	___ imaging suite has fewer than 3 imaging rooms ___ staff toilet room <u>readily</u> accessible* to imaging suite **or** ___ imaging suite has 3 or more imaging rooms ___ staff toilet room <u>immediately</u> accessible* to imaging suite		
2.2-3.5.10	**SUPPORT AREAS FOR PATIENTS**		
2.2-3.5.10.1	___ Patient waiting room or area		
2.2-3.1.3.4		Ventilation:	
(1)	___ seating	___ X-ray imaging rooms served	
(2)	___ public toilet room ___ immediately accessible ___ handwashing station	___ min. 12 air changes per hour ___ exhaust or recirculation through HEPA filter ___ negative pressure	Table 7-1
		or	
(3)	___ access to drinking water	___ no X-ray imaging rooms served	
(4)	___ access to public communications services		
2.2-3.5.10.1(2)	___ suite routinely used for inpatients at same time as outpatients ☐ check if <u>not</u> included in project ___ outpatient waiting & inpatient holding areas separated to provide visual & acoustic privacy		
2.2-3.5.10.1(3)	Sub-Waiting Areas: ☐ check if <u>not</u> included in project		
(a)	___ provision of waiting areas for individual imaging modalities or sharing of sub-waiting areas among similar modalities		
(b)	___ sub-waiting areas screened & separated from unrelated traffic ___ sub-waiting areas are under staff control		
2.2-3.5.10.1(4)	___ Low-level hot patient waiting area ☐ check if <u>not</u> included in project (may be omitted if medical physicist's report indicates it is not necessary) ___ where imaging services will result in patients with low levels of radiation (low-level hot) sub-waiting area to isolate these patients is provided		

	Architectural Requirements	Building Systems Requirements	
2.2-3.5.10.2	___ Patient toilet rooms		
(1)	___ immediately accessible* to waiting areas ___ immediately accessible* to changing rooms ___ handwashing stations	Ventilation: ___ Min 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
(3)	___ Toilet rooms for nuclear imaging patients ☐ check if not included in project (only if Nuclear Imaging is not involved in project)		
(a)	___ immediately accessible* to waiting areas ___ immediately accessible* to nuclear imaging rooms	Ventilation: ___ Min 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
(b)	___ dedicated “hot” toilets for dosed nuclear imaging patients		
2.2-3.5.10.3	___ Patient changing rooms ☐ check if not included in project		
(1)	___ located adjacent* to imaging rooms		
(2)	___ each room includes seat or bench & mirror		
(3)	___ provisions for individual lockable storage for patient clothing & valuables are immediately accessible to changing rooms		

*LOCATION TERMINOLOGY:

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

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

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

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

Architectural Details & MEP Requirements

2.1-7.2.2 **ARCHITECTURAL DETAILS**

2.1-7.2.2.1 CORRIDOR WIDTH:

NFPA 101, 18.2.3.3

___ 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 treatment or use of inpatients not less than 44” in clear & unobstructed width

2.1-7.2.2.2 CEILING HEIGHT:

(1) ___ Min. ceiling height 7’-6” in corridors & in normally unoccupied spaces

(2) ___ Min. ceiling height 9'-0" in seclusion rooms & secure holding rooms

(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

(b) sliding doors

___ sliding doors

☐ check if not included in project

___ manual or automatic sliding doors comply with NFPA 101

___ detailed code review incorporated 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 (e.g. environmental services rooms & electrical closets) & 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 in the case of 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
(7) ___ No mirror at hand scrub stations or at handwashing stations in clean & sterile supply areas

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

2.1-7.2.2.10 HANDRAILS:
(1) ___ Handrails installed on both sides of patient use corridors
(3) ___ Rail ends return to wall or floor
(4) ___ Handrail gripping surfaces & fasteners are smooth (free of sharp or abrasive elements) with 1/8-inch min. radius
(5) ___ Handrails have eased edges & corners
(6) ___ Handrail finishes are cleanable

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:

___ airborne infection isolation (AII) room

___ soiled workroom & soiled holding room

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 (e.g. environmental services rooms) 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**

Part 3/6.1 UTILITIES:

Part 3/6.1.1 Ventilation Upon Loss of Electrical Power:

___ space ventilation & pressure relationship requirements of Table 7-1 are maintained for AII Rooms PE Rooms Operating Rooms in event of loss of normal electrical power

Part 3/6.1.2 Heating & Cooling Sources:

Part 3/6.1.2.1 ___ 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 3/6.1.2.2 Central cooling systems greater than 400 tons (1407 kW) peak cooling load

☐ check if <u>not</u> included in project

___ number & arrangement of cooling sources & essential accessories is sufficient to support owner's facility operation plan upon breakdown or routine maintenance of any one of cooling sources.

Part 3/6.2 AIR-HANDLING UNIT (AHU) DESIGN:

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

Part 3/6.3.1.1 ___ located such that shortest distance from intake to any specific potential outdoor contaminant source be equal to or greater than separation distance listed in Table 6-1

___ located min of 25'-0" from cooling towers & all exhaust & vent discharges

___ air intakes located away from public access

___ all intakes are designed to prevent entrainment of wind-driven rain

___ contain features for draining away precipitation

___ equipped with birdscreen of mesh no smaller than 0.5 in

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 3/6.4 FILTRATION:
a. ___ Particulate matter filters, minimum MERV-8 provided upstream of first heat exchanger surface of any air-conditioning system that combines return air from multiple rooms or introduces outdoor air.
b. ___ Outdoor air filtered in accordance with Table 7-1
c. ___ Air supplied from equipment serving multiple or different spaces is filtered in accordance with Table 7-1
d. ___ Air recirculated within room is filtered in accordance with Table 7-1, or Section 7.1(a)(5)
e. ___ Design includes all necessary provisions to prevent moisture accumulating on filters located downstream of cooling coils & humidifiers
h. ___ For spaces that do not permit air recirculated by means of room units & have minimum filter efficiency of MERV-14, MERV-16 or HEPA in accordance with Table 7-1, the min. filter requirement listed in Table 7-1, is installed 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, operating room 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 6-2

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 filters required by Part 3/6.8.4

Part 3/7 SPACE VENTILATION-HOSPITAL SPACES:
Part 3/7.1.a ___ Spaces ventilated according to Table 7-1
___ Air movement is from clean to less-
Part 3/7.1.a.1 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 min. outdoor air changes per hour required by Table 7-1 for each space meet filtration requirements of Section 6.4
Part 3/7.1a.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 single space
___ provides min MERV 8 filter located upstream of any cold surface so that all of air passing over cold surface is filtered

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

2.1-8.3.3 **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

2.1-8.3.4 **LIGHTING**

2.1-8.3.4.1(1) ___ Luminaires in patient areas have smooth, cleanable, impact-resistant lenses concealing light source

2.1-8.3.4.1(2) ___ Luminaires designed to dissipate heat such that touchable surfaces will not burn occupants or ignite materials

(7) ___ Uplight fixtures installed in patient care areas are covered

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

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 does not exceed 25'-0" in length

(3)(a) ___ no installation of dead-end piping (except for empty risers

(3)(c) mains & branches for future use)

(3)(b) ___ 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 rooms listed below piping have special provisions (e.g double wall containment piping or oversized drip pans) to protect space below from leakage & condensation

- operating rooms
- delivery rooms
- procedure rooms
- trauma rooms
- nurseries
- central kitchens
- one-room sterile processing facilities
- clean workroom of two-room sterile processing facilities
- pharmacies
- Class 2 & 3 imaging rooms
- electronic mainframe rooms (EFs & TERs)
- main switchgear
- electrical rooms
- electronic data processing areas
- electric closets

(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

2.1-8.4.3 **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) ___ designed with basins & faucets that reduce risk of splashing to areas where direct patient care is provided, sterile procedures are performed, medications are prepared or food is 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 medical & nursing 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 & 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 sinks:
(1) ___ trimmed with valves that can are operated without hands
(a) (may be single-lever or wrist blade devices)
(b) ___ handles are at least 6 in long
(2) ___ integral trap wherein upper portion of water trap provides visible seal

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

2.1-8.5.3 **EMERGENCY COMMUNICATION SYSTEM**
___ Emergency-radio communication system provided in each facility
2.1-8.5.3.1 ___ operates independently of building’s service & emergency power systems during emergencies
2.1-8.5.3.2 ___ frequency capabilities to communicate with state emergency communication networks

2.1-8.6.2 **ELECTRONIC SURVEILLANCE SYSTEMS**
☐ check if not included in project
2.1-8.6.2.1 ___ Display screens in patient areas are mounted in tamper-resistant enclosure that is unobtrusive
2.1-8.6.2.2 ___ Display screens 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