COMPLIANCE CHECKLIST

IP12_Emergency 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 2022 Edition of the FGI Guidelines for Design and Construction of Hospitals. Applicants must verify compliance of the plans submitted to the Department with all referenced requirements from the Licensure Regulations and FGI Guidelines when completing this Checklist. A separate Checklist must be completed for each nursing unit, hospital or clinic department, or clinical suite.

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

- NFPA 101 Life Safety Code (2012) and applicable related standards contained in the appendices of the Code
- State Building Code (780 CMR)
- Accreditation requirements of The Joint Commission
- CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities
- USP 797 & Regulations of the Massachusetts Board of Registration in Pharmacy
- Occupational Safety & Health Standards (OSHA)
- Accessibility Guidelines of the Americans with Disabilities Act (ADA)
- Architectural Access Board Regulations (521 CMR)
- Local Authorities having jurisdiction.

Instructions:

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

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

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.

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

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

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

Facility Name:

DoN Project Number: (if applicable)

Facility Address:

Satellite Name: (if applicable)

Building/Floor Location:

Satellite Address: (if applicable)

Submission Dates:

Project Description:

Initial Date:

Revision Date:

	Architectural Requirements	Building Systems Requirements
2.2-3.1	**EMERGENCY SERVICES**	
2.2-3.1.3.1(2)	Security: ___ Emergency department (ED) is designed to assure that access control can be maintained at all times	
2.2-3.1.3.2 2.1-6.2.1	**ENTRANCE** ___ Vehicular drop-off & pedestrian entrance ___ at least one entrance is reachable from grade level	
105 CMR 130.127(A) (1)	Signage and Wayfinding: ___ public entrances to the ED are clearly marked from external approaches and identified by exterior signage & visible from public thoroughfares ___ signs identifying the ED read "EMERGENCY" in all caps in red on a white background or white on a red background ___ public entrances to ED are distinguishable from ED ambulance entrance	
(2)	___ ED patient drop off & entry areas & hospital perimeter doors, which include, but may not be limited to, doors that are locked at night, main entrance doors, ED entrance doors, ambulance entrances & any door a patient may typically use to enter the hospital, are well lit & include directions to the ED. ___ emergency patient vehicle drop off & external & internal entry areas are lit to be distinguishable from other entrances	
(3)	___ exterior hospital entry points are clearly identified from all major exterior routes including roadways, public transportation stops & vehicular parking	
(4)	___ exterior hospital ED identification & directional signs are sufficiently lit to allow drivers & pedestrians to see signage after dark & during inclement weather ___ directional signs leading to the ED are placed in such a manner as to ensure visual continuity	
(5)	___ exterior wayfinding clearly defines the access pathways from public thoroughfares to the hospital main entrance & ED entrance	

Architectural Requirements **Building Systems Requirements**

105 CMR 130.127(B)
Security & Communications:

(1) ___ lighted communications technology with duress alarm features across the grounds of the hospital facility to communicate with on-duty personnel
- ___ includes communication devices at the hospital main entrances, ED entrance, ambulance entrances, & any exterior door a patient may typically use
- ___ includes communication devices in strategic locations around hospital grounds
- ___ such technology are accessible to people with low vision, hearing loss, difficulties with speech & cognitive processing
- ___ system includes emergency duress button stations that are well marked & lit

2.2-3.1.3.2

(1) ___ Public thoroughfares signs direct ambulance traffic to ambulance entrance to ED
___ Vehicle traffic to public entrance

(2) ___ Paved emergency access to permit discharge of patients from automobiles & ambulances be provided

(3) ___ ED entrance is clearly marked

(4) ___ Raised platform/dock used for ambulance discharge
- ☐ check if <u>not</u> included in project
- ___ ramp or elevator/lift to grade level provided for pedestrian & wheelchair access

(5) ___ Emergency vehicle entry cover/canopy
- ___ provides shelter for both patient & emergency medical crew during transfer between emergency vehicle & building

(6) ___ Emergency bays sized to be compatible with horizontal & vertical vehicle clearances of EMS providers

(7) ___ ED ambulance entrances provide min. 6’-0” in clear width to accommodate stretchers/ gurneys & expanded-capacity stretchers/ gurneys, mobile patient lift devices & accompanying attendants

(9) ___ Video surveillance system for each ED public entrance

(10) ___ Duress alarm system outside each public entrance

	Architectural Requirements	Building Systems Requirements
	___ conspicuously located ___ readily accessible ___ immediately available	
2.2-3.1.3.8	___ Diagnostic service areas ___ access to imaging & laboratory services is provided	
2.2-3.1.3.3	**RECEPTION & TRIAGE AREAS**	
	___ Emergency department designed to ensure that access control is maintained at all times	
(1)	___ Reception or triage areas located to provide means for observation of main entrance to department & public waiting area	
(2)	___ Public access points to treatment area are under direct observation of reception & triage areas	
(3)	___ Triage area	
(b)	___ provisions for patient privacy ___ handwashing station provided in each triage room	Ventilation: ___ Min. 12 air changes per hour Table 7-1 ___ Exhaust ___ Negative pressure Power: ___ Min. 6 receptacles in total Table 2.1-1 ___ convenient to head of gurney or bed ___ At least 50% of receptacles connected to emergency power Nurse Call System: ___ Patient station Table 2.1-2 Medical Gases: ___ 1 OX, 1 VAC per station Table 2.1-3
	___ one handwashing station provided for every 4 triage bays or cubicles	
(d)	___ hand sanitation station provided for each triage bay or cubicle	
(e)	___ access to duress alarm for security emergencies	
2.2-3.1.3.4	**PUBLIC WAITING AREA**	
(1)	___ Seating	Ventilation: ___ Min. 12 air changes per hour Table 7-1 ___ Exhaust ___ Negative pressure
(2)	___ Toilet room ___ immediately accessible* ___ handwashing station	Ventilation: ___ Min. 10 air changes per hour Table 7-1 ___ Exhaust ___ Negative pressure ___ No recirculating room units
(3)	___ access to drinking water	
(4)	___ access to public communication services	
2.2-3.1.3.5	**COMMUNICATIONS WITH EMS**	
(1)	___ Communication connections to emergency medical services (EMS)	
(2)	___ EMS base station is provided ☐ check if <u>not</u> included in project ___ designed to reduce noise distractions & interruptions during communications	

	Architectural Requirements	Building Systems Requirements
2.2-3.1.3.6	**GENERAL TREATMENT ROOMS OR AREAS**	
2.2-3.1.3.6(1)	___ Single-patient treatment rooms	
2.1-3.2.2.1	Space Requirements:	Ventilation:
(1)	New Construction:	___ Min. 6 air changes per hour Table 7-1
	___ min. clear floor area 120 sf	Lighting:
	___ min. clear dimension 10'-0"	___ Portable or fixed exam light 2.1-8.3.4.3(3)
	or	Power:
	Renovation:	___ Min. 8 receptacles in total Table 2.1-1
	___ min. clear floor area 100 sf	___ Min. 4 receptacles convenient to head of gurney or bed
(2)(a)	___ room size permits room arrangement with min. clearance 3'-0" at each side & at foot of exam table, recliner or chair	Nurse Call System:
		___ Patient station Table 2.1-2
		Medical Gases:
		___ 1 OX, 1 VAC, 1 MA per gurney Table 2.1-3
2.1-3.2.2.2(2)	___ storage for supplies	
2.1-3.2.2.2(3)	___ accommodations for written or electronic documentation	
2.1-3.2.2.2(4)	___ space for visitor's chair	
2.1-3.2.2.2(5)	___ handwashing station	
2.2-3.1.3.6(2)(b)	___ space for medical equipment	
	___ view panel designed for patient visual privacy adjacent* to and/or in door	
2.2-3.1.3.6(3)	___ Multiple-patient treatment rooms	
	☐ check if <u>not</u> included in project	
2.1-3.2.3.1	Space Requirements:	Ventilation:
(1)	___ separate patient bays or cubicles with min. clear floor area 80 sf per patient care station	___ Min. 6 air changes per hour Table 7-1
		Lighting:
		___ Portable or fixed exam light 2.1-8.3.4.3(3)
(2)(a)	___ min. 5'-0" between sides of adjacent* patient beds	Power:
		___ Min. 8 receptacles in total Table 2.1-1
(2)(b)	___ min. 4'-0" between sides of patient beds & adjacent* walls or partitions	___ Min. 4 receptacles convenient to head of gurney or bed
		Nurse Call System:
2.1-3.2.3.2(2)	___ accommodations for written or electronic documentation	___ Patient station Table 2.1-2
		Medical Gases:
2.1-3.2.3.2(3)	___ space for visitor's chair	___ 1 OX, 1 VAC, 1 MA per gurney Table 2.1-3
2.1-3.2.3.3	___ handwashing station	
(1)	___ at least one handwashing station in each multiple-patient examination room	
2.1-2.8.7.3(1)	___ at least 1 handwashing station for every 4 patient care stations or fewer & for each major fraction thereof	
2.1-2.8.7.3(2)	___ handwashing stations evenly distributed	
2.1-3.2.3.4	___ supply storage	

	Architectural Requirements	Building Systems Requirements	
2.1-3.2.4	___ Sexual assault forensic examination room ☐ check if not included in project		
2.1-3.2.2.1	Space Requirements:	Ventilation:	
(1)	___ min. clear floor area 120 sf ___ min. clear dimension 10'-0"	___ Min. 6 air changes per hour	Table 7-1
(2)(a)	___ room size permits room arrangement with min. clearance 3'-0" at each side & at foot of exam table ___ room arrangement (layout #1) shown in the plans	Lighting: ___ Portable or fixed exam light Power: ___ Min. 8 receptacles in total	Table 2.1-1
(2)(b)	___ exam table, recliner or chair is placed to accommodate type of patient being served ☐ check if not included in project ___ room arrangement (layout #2) shown in the plans	___ Min. 4 receptacles convenient to head of gurney or bed Nurse Call System: ___ Patient station Medical Gases: ___ 1 OX, 1 VAC, 1 MA	Table 2.1-2 Table 2.1-3
2.1-3.2.2.2			
(2)	___ storage for supplies		
(3)	___ accommodations for written or electronic documentation		
(4)	___ space for visitor's chair		
(5)	___ handwashing station		
2.1-3.2.4.1(1)	___ pelvic examination bed/table		
2.1-3.2.4.1(2)	___ lockable storage areas for forensic collection kits laboratory supplies & equipment		
2.1-3.2.4.1(3)	___ private toilet & shower with storage space for clothing shoes linens & bathing products ___ immediately accessible* to sexual assault forensic examination room	Ventilation: ___ Min. 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	
2.1-3.2.4.2	___ room for consultation family support services & law enforcement ___ readily accessible* to sexual assault forensic examination room		
2.2-3.1.3.7	___ Patient toilet room ___ at least one for each 6 treatment rooms/ spaces & for each fraction thereof ___ handwashing station	Ventilation: ___ Min. 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
2.2-3.1.3.6(2)	**GENERAL TRAUMA/RESUSCITATION ROOMS**		
	___ Designed for emergency procedures	Ventilation:	
(a)	___ Single-patient T/R room Space Requirements: ___ min. clear floor area 250 sf ___ min. clearance 5'-0" provided around all sides of gurney	___ Min. 15 air changes per hour ___ Positive pressure ___ No recirculating room units Lighting: ___ Portable or fixed exam light Power: ___ Min. 16 receptacles in total ___ convenient to head of gurney or bed	Table 7-1 2.1-8.3.4.3(3) Table 2.1-1
	or		
(b)	___ Multiple-patient T/R room Space Requirements: ___ min. clear floor area 200 sf for each patient bay defined by privacy curtains ___ min. clearance 5'-0" on all sides of gurney	Nurse Call System: ___ Emergency call station Medical Gases: ___ 1 OX, 3 VAC, 1 MA per gurney	Table 2.1-2 Table 2.1-3

	Architectural Requirements	Building Systems Requirements
	___ min. clearance 10'-0" between each patient bed or gurney	
(c)	___ space for storage of supplies ___ PACS film illuminators or other systems to allow viewing of images & films in room ___ handwashing station ___ space for code cart ___ examination lights ___ accommodations for written or electronic documentation ___ physiological monitoring equipment ___ storage for personal protective equipment	
(d)	___ doorways leading from ambulance entrance to trauma/resuscitation room have min. clear width 72 inches & min. height 83.5 inches	
(f)	___ Trauma room subdivided with cubicle curtains or movable partitions to provide multiple patient care stations ☐ check if not included in project	
2.1-3.2.3.1(1)	___ separate patient bays or cubicles with min. clear floor area 80 sf per patient care station	Ventilation: ___ Min. 6 air changes per hour — Table 7-1
2.1-3.2.3.1(2)(a)	___ min. 5'-0" between sides of adjacent* patient beds	Lighting: ___ Portable or fixed exam light — 2.1-8.3.4.3(3)
2.1-3.2.3.1(2)(b)	___ min. 4'-0" between sides of patient beds & adjacent* walls or partitions	Power: ___ Min. 8 receptacles in total — Table 2.1-1
2.1-3.2.3.2(2)	___ accommodations for written or electronic documentation	___ Min. 4 receptacles convenient to head of gurney or bed
2.1-3.2.3.2(3)	___ space for visitor's chair	Nurse Call System:
	___ Direct access to handwashing station in trauma room or a scrub sink outside trauma room	___ Staff assistance station — Table 2.1-2 ___ Emergency call station
	___ Physical space & operational plan accommodate conversion back to trauma room	Medical Gases: ___ 1 OX, 1 VAC, 1 MA per gurney — Table 2.1-3
	___ Cubicle curtains or movable partitions will not impinge on required trauma room area or clearances when in the stowed position	
2.2-3.1.3.6(2)(g)	___ Trauma/resuscitation room used as treatment room for individuals of size ☐ check if not included in project ___ meets requirements in section 2.2-3.1.3.6(3) below	

	Architectural Requirements	Building Systems Requirements
2.2-3.1.3.6(3)	**TREATMENT ROOM FOR PATIENTS OF SIZE**	
2.1-2.3.1	___ Need to provide spaces designed for safe care of Patients of Size described in Project Narrative	
2.1-2.3.1.1(2)	___ Patient Handling & Movement Assessment (PHAMA) including need for expanded capacity lifts & architectural details supporting movement of patients of size is attached to Project Narrative	
2.1-2.3.1.3	Patient Lift System:	
(1)	___ accommodations for patient handling provided by either overhead lift system or floor-based full-body sling lift & standing-assist lifts	
(2)	___ lifts capable of accommodating projected weight of patients of size	
2.1-2.3.7	___ Single-patient examination or treatment room (may be subdivided with cubicle curtains when not in use for patient of size)	
2.1-2.3.7.2	Space Requirements:	Ventilation:
(1)(a)	___ min. 5'-0" clearance at foot of expanded-capacity exam table	___ Min. 6 air changes per hour Table 7-1
(1)(b)	___ min. 5'-0" clearance on non-transfer side of expanded-capacity exam table	Lighting: ___ Portable or fixed exam light 2.1-8.3.4.3(3)
	Clearance on Transfer Side of Expanded Capacity Exam Table:	Power: ___ Min. 8 receptacles in total Table 2.1-1 ___ Min. 4 receptacles convenient to head of gurney or bed
(1)(c)	___ ceiling- or wall-mounted lift is provided: min. 5’-0” clearance **or** ___ no ceiling- or wall-mounted lift is provided: min. 7’-0” clearance	Nurse Call System: ___ Emergency call station Table 2.1-2 ___ 1 OX, 1 VAC, 1 MA Table 2.1-3
2.1-3.2.2.2		
(2)	___ storage for supplies	
(3)	___ accommodations for written or electronic documentation	
(4)	___ space for visitor’s chair	
(5)	___ handwashing station	
2.2-3.1.3.6(2)(b)	___ space for medical equipment	
	___ view panel designed for patient visual privacy adjacent* to and/or in door	
2.1-2.3.8	___ Equipment & Supply Storage	
	___ accommodates size of expanded-capacity equipment (e.g. floor-based lifts lift, slings & accessories etc.)	

Architectural Requirements

2.1-2.3.10 Special Design Elements for Spaces for Care of Patients of Size:

2.1-2.3.10.1 ___ all plumbing fixtures, handrails, grab bars, patient lift equipment, built-in furniture & other furnishings & equipment designed to accommodate maximum planned patient weight

2.1-2.3.10.2 Door Openings:

(1) ___ min. clear width 45.5" for path of travel of expanded-capacity wheelchairs to public areas & patient care areas

(2) ___ min. clear width 57" to patient rooms

(3) ___ min. clear width 45.5" to toilet rooms

2.2-3.1.3.6(3)(b) ___ Ceiling-lift or wall-mounted lifts
☐ check if not included in project
___ min. clearance 5'-6" from edge of expanded-capacity patient table or bed provided on transfer side

2.2-3.1.3.6(3)(c) ___ Alternate use for multiple patient treatment stations when not in use for individual of size
☐ check if not included in project
___ this treatment room is subdivided with cubicle curtains or movable partitions to accommodate more than one patient
___ each resulting bay or cubicle meets all electrical & medical gas requirements for emergency department treatment areas

2.2-3.1.3.6(5) **FAST-TRACK AREA**
☐ check if not included in project

(2) ___ Single-patient treatment rooms

Space Requirements:

2.2-3.1.3.6(5)(a) ___ min. clear floor area 100 sf

2.1-3.2.2.1(2)(a) ___ room size permits room arrangement with min. clearance 3'-0" at each side & at foot of exam table

2.1-3.2.2.2(2) ___ storage for supplies

2.1-3.2.2.2(3) ___ accommodations for written or electronic documentation

2.1-3.2.2.2(4) ___ space for visitor's chair

2.1-3.2.2.2(5) ___ handwashing station

2.2-3.1.3.6(2)(b) ___ space for medical equipment

___ view panel designed for patient visual privacy adjacent* to and/or in door

2.2-3.1.3.6(5)(b) ___ Waiting area
☐ check if not included in project
___ located for immediate access to patient toilet room

Building Systems Requirements

Ventilation:	
___ Min. 6 air changes per hour	Table 7-1
Lighting:	
___ Portable or fixed exam light	2.1-8.3.4.3(3)
Power:	
___ Min. 8 receptacles in total	Table 2.1-1
___ Min. 4 receptacles convenient to head of gurney or bed	
Nurse Call System:	Table 2.1-2
___ Emergency call station	
Medical Gases:	
___ 1 OX, 1 VAC	Table 2.1-3

Architectural Requirements **Building Systems Requirements**

2.2-3.1.3.6(6) **LOW-ACUITY PATIENT TREATMENT AREA**

☐ check if not included in project

2.2-3.1.3.6(6)(a) ___ Low-acuity patient treatment stations are not be permitted to replace other emergency facility treatment room types in their entirety

2.2-3.1.3.6(6)(b) ___ Low-acuity patient treatment station
- ___ patient bay or patient cubicle

Space requirements:
- ___ min. clear floor area 40 sf
- ___ min. clear dimension 5'-6"
- ___ bay or cubicle accommodates min. clearance of 3'-0" at side, head, or foot of patient chair that corresponds with care providers expected work positions

Ventilation:	
___ Min. 6 air changes per hour	Table 7-1
Power:	
___ 4 receptacles convenient to patient chair	2.1-1
Nurse Call System:	
___ Patient station	2.1-2

2.1-3.2.3.2 Treatment station features:
- (1) ___ examination light in each bay or cubicle
- (2) ___ accommodations for written or electronic documentation in each bay or cubicle
- (3) ___ space for visitor's chair in each bay or cubicle

2.2-3.1.3.6(6)(c) ___ Supply storage
- ___ immediately accessible* to low-acuity patient treatment area

2.2-3.1.3.6(6)(d) ___ Provisions be made to address patient visual & speech privacy

2.2-3.1.3.6(6)(e) ___ Handwashing station
- ___ at least one handwashing station provided in each low-acuity patient treatment area
- ___ at least one handwashing station for every four patient care stations & for each major fraction thereof
- ___ handwashing stations are evenly distributed based on arrangement of patient care stations

(7) **HUMAN DECONTAMINATION FACILITIES**

(a) ___ Interior decontamination room

(i) Location:
- ___ internal door of this room provides direct access into corridor of emergency department or treatment room
- ___ internal door of this room swings into decontamination room
- ___ internal door of this room is lockable against ingress from corridor or treatment room

(ii) Entrance:
- ___ dedicated & secured outside entry door

Architectural Requirements **Building Systems Requirements**

___ located no less than 10'-0" in any direction from next closest entrance
___ entrance is lighted & protected from environment
___ entrance has contrasting boundary line on ground that is 3'-0" from each side of door & extends 6'-0" out from exterior wall
___ word "DECON" be marked on ground within these boundaries.

(iii) Space requirements:
___ min. clear floor area 100 sf
___ means for patient privacy

(iv) Architectural detail & surface requirements:
___ smooth, nonporous, scrubbable, nonabsorptive, nonperforated surfaces
___ floor of decontamination room is seamless & self-coving to height of not less than 6 inches

(v) Plumbing system requirements:
___ min. of two hand-held shower heads, temperature controls, & floor drain
___ dedicated holding tank
☐ check if not included in project (only if allowed by local codes or other jurisdictional authorities)
___ contaminated rinsate is prevented from leaving decontamination room
___ acid-resistant fixtures

Ventilation:	
___ 12 air changes per hour	Table 7-1
___ Exhaust	
___ Negative pressure	
___ No recirculating room units	
Power:	
___ 4 receptacles (wet location)	Table 2.1-1
Nurse Call:	
___ 1 patient station	Table 2.1-2
___ 1 emergency call station	
Medical Gases:	
___ 1 OX (may be portable)	Table 2.1-3

(b) ___ Exterior decontamination structures
☐ check if not included in project

(i) Location:
___ exterior decontamination structure is located no less than 30'-0" from entrances & operable windows
or
___ exterior decontamination shower equipment is permanently attached to exterior walls & under canopies
___ exterior decontamination structure is located no less than 20'-0" from entrances & operable windows
___ exterior decontamination structure is located no less than 30'-0" from outdoor air intakes

	Architectural Requirements	Building Systems Requirements	
(ii)	Exterior decontamination structures provide following: ___ at least two temperature-controlled shower heads, separated by at least 6'-0", with separate spigot for attachment of hose ___ shelter from environment ___ patient privacy ___ provision for containment of contaminants/infectious agents ___ lighting for patient care & staff safety ___ water runoff capability to prevent contaminated water from entering community drainage systems		
2.2-3.1.3.7	**PATIENT TOILET ROOM**	Ventilation:	
2.2-3.1.3.7(1)	___ At least one for each 6 treatment rooms/ spaces & for each fraction thereof ___ handwashing station	___ Min. 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
2.2-3.1.3.7(2)	___ Patient toilet room for secure holding room ☐ check if not included in project (only if no secure holding room is provided)		
2.2-3.1.3.7(2)(a) 2.5-2.2.2.6(3)	___ readily accessible to secure holding room ___ toilet room contains toilet & handwashing station		
2.5-2.2.2.6(4) (a)	Toilet room door: ___ equipped with keyed locks that allow staff to control access to toilet room ☐ check if not included in project (only if allowed by Safety Risk Assessment)		
(b)	___ door swings outward or is double-acting ___ door does not create positive latching condition that may create ligature condition		
2.5-2.2.2.6(5) (a)	ADA-compliant toilet room: ___ thresholds designed to facilitate use & prevent tipping of wheelchairs & other portable wheeled equipment		
(b)	___ grab bars designed to be ligature resistant & facilitate use (i.e., be graspable)		
(c)	___ each entry door provides space for health care providers to transfer patients to toilet using portable mechanical lifting equipment		
2.2-3.1.3.7(2)(b) 2.5-7.2.2.6(1)	___ grab bars anchored to sustain a concentrated load of 250 pounds		
2.2-3.1.3.7(2)(c)			

Architectural Requirements **Building Systems Requirements**

2.5-7.2.3.3 Ceilings:
(1) ___ monolithic ceilings
(a) ___ secured from patient access
(b) ___ mechanical, electrical, & plumbing systems concealed above ceiling
(2) ___ ventilation grilles of tamper- & ligature-resistant type.
(3) ___ ceiling access doors are without gaps & secured with keyed lock and/or tamper-resistant fasteners

2.2-3.1.3.7(2)(d)
2.5-8.1.2 Tamper & ligature resistance:
___ electrical receptacles & other appurtenances are of tamper- & ligature-resistant

2.2-3.1.3.7(2)(e)
2.5-8.3.4.1 ___ luminaires tamper- & ligature-resistant & engineered for specific application

2.2-3.1.3.8 ___ Patient shower room
☐ check if not included in project
(2) (may be combined with patient toilet room)
(1) ___ provisions for patient dressing

2.2-3.1.4.2 **AIRBORNE INFECTION ISOLATION (AII) ROOM**

Location:
(3) ___ AII room visible from nurse station

2.1-2.4.2.4 Architectural Details & Furnishings:
(1)(a) ___ perimeter walls ceiling & floor including penetrations constructed to prevent air exfiltration
(1)(b) ___ self-closing devices on all room exit doors
or
___ activation of audible alarm when AII room is in use as isolation room

___ edge seals provided along sides & top of doorframe for any door into AII room

2.2-3.1.3.6(2)
2.1-3.2.2.1 Space Requirements:
(1) New Construction:
___ min. clear floor area 120 sf
___ min. clear dimension 10'-0"
or
Renovation:
___ min. clear floor area 100 sf

(2)(a) ___ room size permits arrangement with min. clearance 3'-0" at each side & at foot of exam table

Ventilation:	
___ Min. 12 air changes per hour	Table 7-1
___ Exhaust	
___ Negative pressure	
___ No recirculating room units	
___ Exhaust register located directly above patient bed on ceiling or on wall near head of bed	Part 3/7.2.1
Lighting:	
___ Portable or fixed exam light	2.1-8.3.4.3(3)
Power:	
___ Min. 8 receptacles in total	Table 2.1-1

	Architectural Requirements	Building Systems Requirements	
2.1-3.2.2.2(2)	___ storage for supplies		
2.1-3.2.2.2(3)	___ accommodations for written or electronic documentation	___ Min. 4 receptacles convenient to head of gurney or bed	
2.1-3.2.2.2(4)	___ space for visitor's chair	Nurse Call System:	
(5)	___ handwashing station	___ Emergency call station	Table 2.1-2
2.2-3.1.3.6(2)(b)	___ space for medical equipment	Medical Gases:	
	___ view panel designed for patient visual privacy adjacent to and/or in door	___ 1 OX, 1 VAC, 1 MA per patient	Table 2.1-3
2.2-3.1.4.3	**ROOMS SERVING BEHAVIORAL AND MENTAL HEALTH PATIENTS** ☐ check if not included in project		
2.2-3.1.4.3(1)	Location:		
(b)	___ locations of designated behavioral & mental health rooms facilitate staff observation & monitoring of patients in these areas		
2.2-3.1.4.3(2)	___ Secure holding room ☐ check if not included in project		
2.2-3.1.4.3(2)(a)	___ min. clear floor area of 60 sf ___ min. wall length 7'-0" ___ maximum wall length 12'-0"	Ventilation: ___ Min. 6 air changes per hour	Table 7-1
2.2-3.1.4.3(2)(b)	___ designed to prevent injury to patients		
(i)	___ min. ceiling height 9'-0"		
(ii)	___ finishes, light fixtures, vents & diffusers, & sprinklers are impact-, tamper-, & ligature-resistant		
(iii)	___ no electrical outlets, medical gas outlets, or similar devices		
(iv)	___ no sharp corners, edges, or protrusions, & walls be free of objects or accessories of any kind		
(v)	___ doors swing out & have hardware on exterior side only		
(vi)	___ small impact-resistant view panel or window provided in wall adjacent to door or in door for staff observation of patient ___ glazing in view panel or window fabricated with polycarbonate or laminate on inside of glazing or tempered glass (or with any glazing that meets or exceeds requirements for Class 1.4 per ASTM F1233)		
2.2-3.1.4.3(2)(c) 2.1-7.2.2.3(2)(a)	___ min. clear door opening 44.5" in width & 83.25" in height		
2.2-3.1.4.3(3)	___ Flexible secure treatment room ☐ check if not included in project		
2.2-3.1.4.3(2)(a)	___ min. wall length 7'-0" ___ maximum wall length 12'-0"	Ventilation: ___ Min. 6 air changes per hour	Table 7-1

Architectural Requirements

2.2-3.1.4.3(2)(b) ___ designed to prevent injury to patients
(i) ___ min. ceiling height 9'-0"
(ii) ___ finishes, light fixtures, vents & diffusers, & sprinklers are impact-, tamper-, & ligature-resistant
(iv) ___ no sharp corners, edges, or protrusions, & walls be free of objects or accessories of any kind
(v) ___ doors swing out & have hardware on exterior side only
(vi) ___ small impact-resistant view panel or window provided in wall adjacent to door or in door for staff observation of patient
___ glazing in view panel or window fabricated with polycarbonate or laminate on inside of glazing or tempered glass (or with any glazing that meets or exceeds requirements for Class 1.4 per ASTM F1233)

2.2-3.1.4.3(2)(c)
2.1-7.2.2.3(2)(a) ___ min. clear door opening 44.5" in width & 83.25" in height

2.2-3.1.3.6(1)
2.1-3.2.2.1 Space requirements:
(1) New Construction:
___ min. clear floor area 120 sf
___ min. clear dimension 10'-0"
or
Renovation:
___ min. clear floor area 100 sf

(2)(a) ___ room size permits room arrangement with min. clearance 3'-0" at each side & at foot of exam table, recliner or chair

2.1-3.2.2.2(2) ___ storage for supplies
2.1-3.2.2.2(3) ___ accommodations for written or electronic documentation
2.1-3.2.2.2(4) ___ space for visitor's chair
2.1-3.2.2.2(5) ___ handwashing station
2.2-3.1.3.6(2)(b) ___ space for medical equipment
___ view panel designed for patient visual privacy adjacent* to and/or in door

Additional requirements:
2.2-3.1.4.3(3)(a) ___ handwashing station located outside flexible secure treatment room
___ adjacent to room
or
2.2-3.1.4.3(3)(b) ___ handwashing station located in flexible secure treatment room
___ means for covering & securing handwashing station are provided & are controlled by staff

Building Systems Requirements

Ventilation:	
___ Min. 6 air changes per hour	Table 7-1
Lighting:	
___ Portable or fixed exam light	2.1-8.3.4.3(3)
Power:	
___ Min. 8 receptacles in total	Table 2.1-1
___ Min. 4 receptacles convenient to head of gurney or bed	
Nurse Call System:	
___ Patient station	Table 2.1-2
Medical Gases:	
___ 1 OX, 1 VAC, 1 MA per gurney	Table 2.1-3

Architectural Requirements **Building Systems Requirements**

___ means for covering & securing electrical receptacles, medical gas outlets, vacuum inlets, & similar features are provided & are controlled by staff

2.2-3.1.4.3(4) ___ Behavioral & mental health treatment room
☐ check if not included in project

2.2-3.1.3.6(1)
2.1-3.2.2.1 Space requirements:
(1) New Construction:
___ min. clear floor area 120 sf
___ min. clear dimension 10'-0"
or
Renovation:
___ min. clear floor area 100 sf

(2)(a) ___ room size permits room arrangement with min. clearance 3'-0" at each side & at foot of exam table, recliner or chair

2.1-3.2.2.2(2) ___ storage for supplies
2.1-3.2.2.2(3) ___ accommodations for written or electronic documentation
2.1-3.2.2.2(4) ___ space for visitor's chair
2.1-3.2.2.2(5) ___ handwashing station
2.2-3.1.3.6(2)(b) ___ space for medical equipment
___ view panel designed for patient visual privacy adjacent* to and/or in door

Additional requirements:
2.2-3.1.4.3(4)(a) ___ all door hardware, sinks, finishes, light fixtures, sprinklers, & outlets are tamper- & ligature-resistant
2.2-3.1.4.3(4)(b) ___ locks are provided on storage devices & cabinetry to prevent patient access
2.2-3.1.4.3(4)(c) ___ room provided with features to limit patient ability to convert equipment into weapons, as follows:
(i) ___ cabinetry to enclose or store treatment equipment when this room is used for behavioral patient
(ii) ___ any devices are designed to prevent removal through tamper-resistant hardware & structural attachments

Ventilation:	
___ Min. 6 air changes per hour	Table 7-1
Lighting:	
___ Portable or fixed exam light	2.1-8.3.4.3(3)
Power:	
___ Min. 8 receptacles in total	Table 2.1-1
___ Min. 4 receptacles convenient to head of gurney or bed	
Nurse Call System:	
___ Patient station	Table 2.1-2
Medical Gases:	
___ 1 OX, 1 VAC, 1 MA per gurney	Table 2.1-3

2.2-3.1.8 **SUPPORT AREAS FOR EMERGENCY DEPARTMENT**
2.2-3.1.8.2 ___ Administrative center or nurse station
(2) ___ nurse master station & central monitoring equipment be provided
(3) ___ Decentralized nurse stations near clusters of treatment rooms
☐ check if not included in project

	Architectural Requirements	Building Systems Requirements	
(4)	___ Visual observation of traffic into ED & traffic within ED is provided		
2.1-2.8.2.1(1)	___ space for counters		
2.1-2.8.2.1(2)	___ handwashing station next to or directly accessible **or** ___ hand sanitation dispenser next to or directly accessible		
2.1-2.8.2.2	___ Center for reception & communication ___ self-contained **or** ___ combined with administrative center or nurse station		
2.2-3.1.8.11 2.1-2.8.11.3	___ Clean supply room ___ used only for storage & holding as part of system for distribution of clean & sterile supplies	Ventilation: ___ Min. 4 air changes per hour ___ Positive pressure	Table 7-1
2.2-3.1.8.12 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		
2.2-3.1.8.13 (1)	___ Wheelchair & gurney storage area for arriving patients		
(2) 2.1-2.8.13.4(2)	___ Emergency equipment storage ___ provided under visual observation by staff		
(3)	___ storage locations in corridors do not encroach on min. required corridor width		
2.2-3.1.8.14	___ Environmental services room ___ directly accessible from ED		
2.1-2.8.14.2(1)	___ service sink or floor-mounted mop sink	Ventilation: ___ Min. 10 air changes per hour	Table 7-1
2.1-2.8.14.2(2)	___ provisions for storage of supplies & housekeeping equipment	___ Exhaust ___ Negative pressure ___ No recirculating room units	
2.1-2.8.14.2(3)	___ handwashing station **or** ___ hand sanitation station		

	Architectural Requirements	Building Systems Requirements
2.2-3.1.8.16	___ Security station ___ located near emergency entrances & triage/reception area ___ means of observing public waiting areas ___ means of observing ED pedestrian ambulance entrance ___means of observing ED ambulance entrance ___ means of controlling access	
2.2-3.1.9	**SUPPORT AREAS FOR EMERGENCY DEPARTMENT STAFF** Location: ___ staff support areas immediately accessible to Emergency Department	
2.1-2.9.1	___ Staff lounge ___ min.100 sf	
2.1-2.9.2	___ Staff toilet room (permitted to be unisex)	
2.1-2.9.2.1	___ readily accessible to patient care areas	Ventilation: ___ Min. 10 air changes per hour Table 7-1 ___ Exhaust ___ Negative pressure ___ No recirculating room units
2.1-2.9.2.2	___ toilet & handwashing station	
2.1-2.9.3	___ Staff storage facilities	
2.1-2.9.3.1	___ securable closets or cabinet compartments for personal staff articles ___ located in or near nurse station	

LOCATION TERMINOLOGY:

Directly accessible: Connected to the 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 the identified area or room

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

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

Architectural Details & MEP Requirements

2.1-7.2.2 **ARCHITECTURAL DETAILS**

2.1-7.2.2.1 CORRIDOR WIDTH:
NFPA 101, 18.2.3.3
___ Aisles, corridors & ramps required for exit access in 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
(3)(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

2.1-7.2.2.12 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

___ trauma rooms

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) Semi-Restricted Areas:

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

(a) ___ ceiling finishes are scrubbable, non absorptive, non perforated, & capable of withstanding cleaning with chemicals

(b) ___ lay-in ceilings

___ gasketed or each ceiling tile weighs at least one pound per square foot

(c) ___ use of perforated tegular serrated or highly textured tiles not are permitted in semi-restricted areas

or

___ ceilings of monolithic construction

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 & EXHAUST DISCHARGES:

Part 3/6.3.1 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 3/6.3.2 Exhaust Discharges:

Part 3/6.3.2.1
- ___ ductwork within building is under negative pressure for exhaust of contaminated air (i.e. air from All rooms)
- ___ exhaust discharge outlets with contaminated air located such that they reduce potential for recirculation of exhausted air back into building

Part 3/6.3.2.2
- ___ exhaust discharge outlets with contaminated air additionally is arranged to discharge to atmosphere in vertical direction at least 10'-0" above adjoining roof level
- ___ exhaust discharge outlets from All rooms, bronchoscopy & sputum collection exhaust are located not less than 25'-0" horizontally from outdoor air intakes openable windows/ doors & areas that are normally accessible to public

Part 3/6.4 FILTRATION:

a. ___ Particulate matter filters, min. 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 min. 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 All 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 3/6.8.2 ___ AII room exhaust systems or combination AII/PE rooms are not used for energy recovery

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

Part 3/7.2 ADDITIONAL ROOM-SPECIFIC REQUIREMENTS:
Part 3/7.2.1 Airborne Infection Isolation (AII) Rooms
☐ check if not included in project
___ AII rooms have permanently installed device and/or mechanism to constantly monitor differential air pressure between room & corridor
___ Local visual means is provided to indicate whenever negative differential pressure is not maintained
___ Air from AII room is exhausted directly to outdoors

Exhaust air from AII rooms, associated anterooms & toilet rooms:
___ is discharged directly to outdoors without mixing with exhaust air from any other non-AII room or exhaust system
or
___ is discharged into the general exhaust stream, provided the AII room exhaust air first passes through HEPA filter (all exhaust ductwork kept under negative pressure)

___ Exhaust air grille or register in patient room is located directly above patient bed on ceiling or on wall near head of bed
___ Anteroom
☐ check if not included in project
___ AII room is at negative pressure with respect to anteroom
___ Anteroom is at negative pressure with respect to corridor

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.
(3) Exam/treatment/trauma rooms:
___ portable or fixed exam light
(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 Flushing-Rim 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

2.1-8.4.3.6 Scrub Sinks:
☐ check if not included in project

(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

2.1-8.5.3 **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