COMPLIANCE CHECKLIST

IP21_Renal Dialysis Services (Acute & Chronic)

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
2.2-3.10	**RENAL DIALYSIS SERVICES (ACUTE & CHRONIC)**	
2.2-3.10.1.1	Application: ___ Renal dialysis facilities in hospital that treat patients with acute & chronic end stage renal disease (ESRD) including dialysis	
2.2-3.10.1.2	provided in acute or intensive care unit	
2.2-3.10.2	**HEMODIALYSIS TREATMENT AREA** ☐ check if not included in project (only if dialysis is provided in acute or intensive care unit)	
2.2-3.10.2.1(2)	___ Treatment area separate from administrative waiting areas	
2.2-3.10.2.1(3)	Patient scale ___ dedicated space provided for patient scale	
2.2-3.10.2.2	Space Requirements for Individual Hemodialysis Patient Care Stations:	
(1)	___ No built-in cabinetry in individual hemodialysis patient care stations	
	___ patient care stations with dialysis chairs ☐ check if not included in project	Ventilation: ___ Min 6 air changes per hour Table 7-1 Power: ___ Min 8 receptacles Table 2.1-1 ___ Min 4 receptacles on each side of bed or lounge chair ___ Min 2 receptacles on each side of bed connected to emergency power
(2)(a)	___ min clear floor area of 80 sf	
(2)(b)	___ min clearance 4’-0” between sides of dialysis chairs	
	___ min clearance 3’-0” between sides of dialysis chairs & adjacent* walls or partitions	
	___ min clearance 2’-0” between foot of dialysis chairs & cubicle curtains	
	___ patient care stations with beds ☐ check if not included in project	Ventilation: ___ Min 6 air changes per hour Table 7-1 Power: ___ Min 8 receptacles Table 2.1-1 ___ Min 4 receptacles on each side of bed or lounge chair ___ Min 2 receptacles on each side of bed connected to emergency power
(2)(a)	___ min clear floor area of 90 sf	
(2)(b)	___ min clearance 4’-0” between sides of beds	
	___ min clearance 3’-0” between sides of beds & adjacent* walls or partitions	
	___ min clearance 2’-0” between foot of beds & cubicle curtains	
2.2-3.10.2.4	___ Hemodialysis treatment area accommodates provisions for patient privacy	
2.2-3.10.2.5(1)	___ Handwashing stations	
2.2-3.10.2.5(2)	___ located at entry to hemodialysis treatment area (may contribute to total number of handw stations required)	
2.1-2.8.7.1	___ located in each room where hands-on patient care is provided	

Architectural Requirements **Building Systems Requirements**

2.1-2.8.7.3 ___ handwashing station serves multiple patient care stations
☐ check if not included in project
(1) ___ at least 1 handwashing station for every 4 patient care stations or fewer & for each major fraction thereof
(2) ___ handwashing stations evenly distributed

2.2-3.10.2.6 Fluid disposal sink
(1) ___ at least one dedicated fluid disposal sink is provided in treatment area (for disposal of dialysate & other byproducts of dialysis)
(2) ___ non-sensor-operated hands-free faucets or fittings
(3) ___ adequate depth to avoid potential splash of biological waste & cross contamination to areas with stored or prepared clean items
(4) ___ located to prevent cross contamination of handwashing station

2.2-3.10.3 ___ Home training room
☐ check if not included in project
2.2-3.10.3.1 ___ private treatment room
___ at least 120 sf
2.2-3.10.3.2
(1) ___ counter
(2) ___ handwashing station
(3) ___ separate drain for fluid disposal

2.2-3.10.4.1 ___ Dedicated hemodialysis room for patients with special precaution needs (isolation room to prevent contact transmission of infectious microorganisms)
(1)(a) ___ single-patient room
(1)(b) ___ dedicated room allows for direct staff observation of patient's face & insertion point during treatment
(2)(a) ___ min clear floor area of 120 sf
(2)(b) ___ handwashing station
(2)(c) ___ dedicated fluid disposal sink
2.2-3.10.2.6 (for disposal of dialysate & other by-
(1) products of dialysis)
(2) ___ non-sensor-operated hands-free faucets or fittings
(3) ___ adequate depth to avoid potential splash of biological waste & cross contamination to areas with stored or prepared clean items
(4) ___ located to prevent cross contamination of handwashing station

Ventilation:
___ Min 6 air changes per hour Table 7-1

Power:
___ Min 4 receptacles on each side of bed Table 2.1-1
___ Min 2 receptacles on each side of bed or lounge chair connected to emergency power

	Architectural Requirements	Building Systems Requirements	
(d)	___ storage for personal protective equipment (PPE)		
(3)	Architectural details ___ door & walls are provided ___ walls extend to floor (but not necessarily to ceiling) ___ provisions for visual monitoring of patient		
2.2-3.10.8	**SUPPORT AREAS FOR RENAL DIALYSIS UNIT**		
2.2-3.10.8.2	___ Nurse station		
(1)	___ located in hemodialysis treatment area		
(2)	___ designed to provide visual observation of all dialysis patient care stations		
(a)	___ visual observation includes patient's face & vascular access point		
(b)	___ view from central nurse station **or** ___ view from decentralized nurse stations		
2.2-3.10.8.2(1) 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*		
2.2-3.10.8.8	___ Medication safety zone		
2.2-3.10.8.8(2)	___ dedicated medication safety zone ___ centrally located in dialysis unit		
2.2-3.10.8.8(3)	___ at least 6'-0" from any individual patient care station		
2.2-3.10.8.8(1) 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 ___ handwashing station ___ lockable refrigerator	___ Min 4 air changes per hour Lighting: ___ Task lighting	Table 7-1 2.1-2.8.8.1(2)(d)

	Architectural Requirements	Building Systems Requirements	
	___ 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:	
(c)	___ handwashing station or hand sanitation dispenser located next to stationary medication-dispensing units or stations	___ Task lighting	2.1-2.8.8.1(2)(d)
2.2-3.10.8.11	___ Clean workroom or clean supply room		
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
2.2-2.2.8.12	___ Soiled workroom or soiled holding room		
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 not included in project		
(a)	___ electrical & plumbing connections that meet manufacturer requirements		
(b)	___ space for docking station		
	or		
2.1-2.8.12.3	___ soiled holding room	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	

	Architectural Requirements	Building Systems Requirements	
2.2-3.10.8.13(1) 2.1-2.8.13.1	___ Clean linen storage		
(1)	___ stored in clean workroom **or** ___ separate closet **or** ___ covered cart distribution system on each floor		
(2)	___ storage of clean linen carts in designated corridor alcoves clean workroom or closets		
(2)	___ Clinical equipment & supply storage areas (may be space for supply carts)		
(3)	___ Storage space for wheelchairs		
(a)	___ Storage space for gurneys ☐ check if not included in project		
(b)	___ Area for wheelchair parking ☐ check if not included in project (only if outpatient dialysis services are not provided) ___ located in non-public area ___ out of any required egress width ___ out of any required clearance ___ minimum one wheelchair storage or parking space provided for every four patient care stations (at least one wheelchair storage or parking space provided where there are fewer than four patient care stations)		
2.2-3.10.8.14	___ Environmental services room		
2.2-3.10.8.14(1)	___ adjacent* to & for exclusive use of dialysis unit	Ventilation:	
2.2-3.10.8.14(2)	___ water supply & drain connection for testing machines	___ Min 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
2.1-2.8.14.2 (1)	___ service sink or floor-mounted mop sink		
(2)	___ provisions for storage of supplies & housekeeping equipment		
(3)	___ handwashing station **or** ___ hand sanitation station		
2.2-3.10.8.16	___ Dialyzer reprocessing room ☐ check if not included in project (only if dialyzers are not processed for reuse on-site)		
(1)	___ design provides for one-way flow of materials from soiled to clean	Ventilation:	
(2)		___ Min 10 air changes per hour ___ Exhaust	Table 7-1

	Architectural Requirements	Building Systems Requirements	
(a)	___ refrigeration for temporary storage of dialyzers	___ Negative pressure ___ No recirculating room units	
(b)	___ decontamination/cleaning areas		
(c)	___ handwashing station		
(d)	___ processors		
(e)	___ computer processors & label printers		
(f)	___ packaging area		
(g)	___ dialyzer storage cabinets		
2.2-3.10.8.17	___ Dialysate preparation room ☐ check if not included in project (only if no central dialysate mixing & delivery system is used to provide individual dialysate solutions for patient treatment)		
(1)	___ space to accommodate dialysate mixing & distribution equipment		
(2)			
(a)	___ handwashing station		
(b)	___ storage space		
(c)	___ work counter		
(d)	___ floor drain		
(e)	___ treated water outlet ☐ check if not included in project (only if no separate treated water distribution system is provided)		
2.2-3.10.8.18	___ Hemodialysis water treatment equipment area ___ located in dedicated secure area ___ space to access all components of equipment		
(1)	___ floor drain		
2.2-3.10.8.19	___ Equipment repair room ☐ check if not included in project		
(1)	___ handwashing station		
(2)	___ treated water outlet for equipment maintenance ___ drain or clinical service sink for equipment connection & testing		
(3)	___ work counter		
(4)	___ storage cabinet		
2.2-3.10.9	**SUPPORT AREAS FOR STAFF**		
2.2-3.10.9.1	(may be shared with adjacent* diagnostic & treatment areas)		
2.2-3.10.9.2			
(1)	___ Lockers		
(2)	___ Toilet room	Ventilation:	
(3)	___ handwashing station	___ Min 10 air changes per hour ___ Exhaust ___ Negative pressure ___ No recirculating room units	Table 7-1
(4)	___ Eyewash station ___ Emergency shower		

	Architectural Requirements	Building Systems Requirements	
2.2-3.10.10	**SUPPORT AREAS FOR PATIENTS** ___ All support areas listed below are immediately accessible* to dialysis unit		
2.2-3.10.10.1	___ Waiting room		
2.2-3.10.10.2	___ Patient toilet room	Ventilation:	
(1)	___ handwashing station	___ Min 10 air changes per hour	Table 7-1
		___ Exhaust	
		___ Negative pressure	
		___ No recirculating room units	
(2)		Nurse Call System:	2.2-3.10.10.2
		___ Patient toilet room equipped with nurse call device	(2)
2.2-3.10.10.3	___ Storage for patient belongings		
2.2-3.10.10.4	___ Access to drinking water		
2.2-3.10.10.5	___ Access to public communications services		

*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 NFPA 101, 18.2.3.3 CORRIDOR WIDTH:
___ 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
(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
(a) ___ hand-drying device does not require hands to contact dispenser
(b) ___ hand-drying device is enclosed to protect against dust or soil & to ensure single-unit dispensing
(6) ___ liquid or foam soap dispensers

2.1-7.2.2.9 GRAB BARS:
(1) ___ Grab bars anchored to sustain concentrated load 250 pounds
(3) ___ Ends of grab bars constructed to prevent snagging clothes of patients staff & visitors

2.1-7.2.2.10 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:
___ 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 not 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 3/6.7 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

Part 3/7.1.a.1 ___ Air movement is from clean to less-clean areas

Part 3/7.1.a.3 ___ Min number of total air changes required for positive pressure rooms is provided by total supply airflow

___ Min number of total air changes required for negative pressure rooms is provided by total exhaust airflow

Part 3/7.1.a.4 ___ Entire 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

2.1-8.4.2.2 Hemodialysis/Hemoperfusion Water Distribution:

(1)(a) ___ separate treated water distribution system

(2)(b) ___ outlet at each individual hemodialysis treatment bay

___ outlet at hemodialysis equipment repair area

___ outlet at dialysate preparation area

or

(1)(b) ___ dialysis equipment includes sufficient water treatment provisions for use of domestic cold water

(1)(a) ___ drainage system independent from tap water

(4) ___ liquid waste & disposal system for hemodialysis treatment area are designed to minimize odor & prevent backflow

(5) ___ hemodialysis distribution piping is readily accessible* for inspection & maintenance

2.1-8.4.2.5 Heated Potable Water Distribution Systems:

(2) ___ heated potable water distribution systems serving patient care areas are under constant recirculation

___ non-recirculated fixture branch piping max. 25'-0" in length

(3)(a) ___ no installation of dead-end piping (except for empty risers 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:
☐ check if not included in project
(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