

fCOMPLIANCE CHECKLIST**IP7 Neonatal Intensive Care Unit**

The following checklist is intended to be used in the plan review applications for health care facilities submitted to the Massachusetts Department of Public Health. This checklist summarizes and references the applicable requirements from the Licensure Regulations and the 2018 Edition of the FGI Guidelines for Design and Construction of Hospitals. Applicants must verify compliance of the plans submitted to the Department with all referenced requirements from the Licensure Regulations and FGI Guidelines when completing this Checklist. A separate Checklist must be completed for each nursing unit, hospital or clinic department, or clinical suite.

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

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

Instructions:

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

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

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

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

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

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

Facility Name:

DoN Project Number: (if applicable)

Facility Address:

Patient Care Unit Bed Complements:

Current = Proposed =

Satellite Name: (if applicable)

Building/Floor Location:

Satellite Address: (if applicable)

Submission Dates:

Initial Date:

Revision Date:

Project Description:

Architectural Requirements**Building Systems Requirements****2.2-2.8****NEONATAL INTENSIVE CARE UNIT****2.1-1.2.3****Shared Services:**

- ___ No combined functions unless specifically allowed in this checklist

2.2-2.8.1.2**(1)****Location:**

- ___ all entries to NICU secured with controlled access by door locking or by direct or indirect visual observation

(2)

- ___ family entrance & reception area is clearly identified

(3)

- ___ reception area permits visual observation & contact with all traffic entering unit

(4)

- ___ NICU designed to protect physical security of infants parents & staff & to minimize risk of infant abduction

2.2-2.8.2**NICU ROOMS & AREAS****2.2-2.8.2.2(1)(a)**

- ___ Multiple-infant rooms (including those with bays, cubicles or movable cubicle partitions)

- ☐ check if not included in project

Space Requirements:

- ___ each infant care station contains min. clear floor area 120 sf per infant care bed

(2)(a)

- ___ aisle adjacent* to each infant care station with min. width 4'-0"

(2)(b)

- ___ fixed cubicle partitions
☐ check if not included in project
 ___ adjacent* aisle with min. clear width 8'-0" to permit passage of equipment & personnel

(3)(a)

- ___ min. clearance 8'-0" provided between infant care beds

(3)(b)

- ___ min. clearance 1 foot at head of infant care bed
 ___ min. clearance 4'-0" between sides of infant care beds & any wall or other fixed obstruction

2.2-2.8.2.5(1)**Handwashing Stations:**

- ___ every bed position located within 20'-0" of handwashing station

Ventilation:		
___ Min. 4 air changes per hour	Table 7.1	
Lighting:		
___ General lighting	2.1-8.3.4.3(1)	(c)
___ Lighting for NICU bed permits staff observation of patient		
___ minimizes glare		
Power:		
___ Min. 16 receptacles in total	Table 2.1-1	
___ convenient to head of bed	+ Errata	
Nurse Call System:		
___ Staff assistance station for each bed	Table 2.1-2	
___ Emergency call station for each bed		
Medical Gases:		
___ 3 OX, 3 VAC, 3 MA per bed	Table 2.1-3	

Architectural Requirements**Building Systems Requirements**

- (1)(b) ☐ Single-infant rooms
☐ check if not included in project
 Space Requirements:
 _____ min. clear floor area 165 sf
 (3)(b) _____ min. clearance 1 foot at head of infant care bed
 _____ min. clearance 4'-0" between sides of infant care beds & any wall or other fixed obstruction
 Handwashing Stations:
 2.2-2.8.2.5(2) _____ handwashing station provided in each room
- 2.2-2.8.2.3 _____ Windows
 _____ at least one source of daylight is visible from infant care areas
 (1) _____ exterior windows glazed with insulating glass to minimize heat gain or loss
 (2) _____ exterior windows are situated at least 2'-0" from any part of infant bed
 _____ exterior windows are sized to minimize radiant heat loss from infant
 (3) _____ all daylight sources are equipped with shading devices
- 2.2-2.8.2.4 _____ Each infant care station is designed to allow visual privacy for infant & family
- 2.2-2.8.4 **SPECIAL PATIENT CARE ROOMS**
 2.2-2.8.4.2 _____ Airborne infection isolation (AII) room
 (1) _____ provisions for observation of infant in AII room from adjacent* areas of NICU
 2.1-2.4.2.2 _____ complies with requirements applicable to NICU patient rooms
 (1) _____ capacity one bed
 (2) _____ personal protective equipment (PPE) storage at entrance to room
 (3) _____ handwashing station
- 2.1-2.4.2.3 _____ Anteroom
☐ check if not included in project
 (1) _____ provides space for persons to don personal protective equipment (PPE) before entering patient room

Ventilation:		
_____ Min. 4 air changes per hour	Table 7.1	
Lighting:		
_____ General lighting	2.1-8.3.4.3(1)	(c)
_____ Lighting for NICU bed permits staff observation of patient		
_____ minimizes glare		
Power:		
_____ Min. 16 receptacles in total	Table 2.1-1	
_____ convenient to head of bed		
Nurse Call System:		
_____ Patient station	Table 2.1-2	
_____ Staff assistance station		
_____ Emergency call for each bed		
Medical Gases:		
_____ 3 OX, 3 VAC, 3 MA per bed	Table 2.1-3	

Architectural Requirements**Building Systems Requirements**

- (2) ☐ all doors to anteroom have self-closing devices
or
☐ audible alarm activated when AII room is in use as isolation room
- (3)(a) ☐ handwashing station
 (3)(b) ☐ storage for unused PPE
 (3)(c) ☐ disposal/holding container for used PPE
- 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) (a) ☐ window treatments do not include fabric drapes & curtains
 2.1-7.2.3.1(7)(a) ☐ floors are monolithic & integral coved wall bases are at least 6" high & tightly sealed to wall
 2.1-2.4.2.5 ☐ room pressure visual or audible alarm

SUPPORT AREAS FOR NICU

- 2.2-2.8.8 ☐ Administrative center or nurse station
 2.2-2.8.8.2 ☐ space for counters
 2.1-2.8.2.1(1) ☐ handwashing station next to or directly accessible*
 2.1-2.8.2.1(2) **or**
☐ hand sanitation dispenser next to or directly accessible*
- 2.2-2.8.8.3 ☐ Documentation area
 2.1-2.8.3.1 ☐ work surface to support documentation process
 2.2-2.8.8.4 ☐ Nurse/supervisor office or station
 2.2-2.8.8.5 ☐ Multipurpose room
 (1) ☐ at least one multipurpose room for each facility for patient conferences, reports, education, training sessions & consultation (may serve several patient care units & departments)
 (2) ☐ readily accessible* to patient care unit

Nurse Call System:

- ☐ Duty station (light/sound signal)

2.1-8.5.1.2(3)(b)

	Architectural Requirements	Building Systems Requirements	
2.2-2.8.8.8	___ Medication safety zones		
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: ___ Min. 4 air changes per hour	Table 7.1
(b)	___ work counter	Lighting: ___ Task lighting	2.1-2.8.8.1(2)(d)
	___ handwashing station		
	___ lockable refrigerator		
	___ locked storage for controlled drugs		
	___ sharps containers	Nurse Call System: ___ Duty station (light/sound signal)	Table 2.1-2
	<input type="checkbox"/> check if <u>not</u> included in project		
(c)	___ self-contained medication-dispensing unit		
	<input type="checkbox"/> check if <u>not</u> included in project		
	___ room designed with space to prepare medications		
	or		
2.1-2.8.8.2(2)	___ automated medication-dispensing unit		
(a)	___ located at nurse station, in clean workroom or in alcove	Lighting: ___ Task lighting	2.1-2.8.8.1(2)(d)
(c)	___ handwashing station located next to stationary medication-dispensing units or stations	Nurse Call System: ___ Duty station (light/sound signal)	Table 2.1-2
2.1-2.8.10	___ Ice-making equipment		
2.2-2.8.8.11	___ Clean workroom or clean supply room		
2.1-2.8.11.2	___ clean workroom	Ventilation: ___ Min. 4 air changes per hour	Table 7.1
(1)	___ used for preparing patient care items	___ Positive pressure	
(2)	___ work counter		
(3)	___ handwashing station		
	___ storage facilities for clean & sterile supplies		
	or		
2.1-2.8.11.3	___ clean supply room	Ventilation: ___ Min. 4 air changes per hour	Table 7.1
	___ used only for storage & holding as part of system for distribution of clean & sterile supplies	___ Positive pressure	

Architectural Requirements**Building Systems Requirements**

- 2.2-2.8.8.12
2.1-2.8.12.2
- ___ Soiled workroom or soiled holding room
___ soiled workroom
- (1)(a) ___ handwashing station
(1)(b) ___ flushing-rim clinical service sink
with bedpan-rinsing device or
equivalent flushing-rim fixture
(1)(c) ___ work counter
(1)(d) ___ space for separate covered
containers for waste & soiled linen
- (2) ___ fluid management system is used
___ check if not included in project
- (a) ___ electrical & plumbing
connections that meet
manufacturer requirements
(b) ___ space for docking station
- or**
- 2.1-2.8.12.3 ___ soiled holding room
- (1) ___ handwashing station or hand
sanitation station
(2) ___ space for separate covered
containers for waste & soiled linen
- 2.1-2.8.13.1
(1) ___ Clean linen storage
___ 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
- 2.1-2.8.13.2 ___ Equipment & supply storage room or alcoves
___ sized to provide min. 10 sf per patient bed
- 2.1-2.8.13.3 ___ Storage space for gurneys, stretchers &
wheelchairs
- 2.2-2.8.8.13
(1) ___ Emergency equipment storage
___ each patient care unit has at least one
emergency equipment storage location
(2) ___ provided under visual observation of
staff
(3) ___ storage locations in corridors do not
encroach on minimum required
corridor width

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

- Nurse Call System:
___ Duty station (light/sound
signal) Table 2.1-2

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

Architectural Requirements**Building Systems Requirements**

- 2.2-2.8.8.14 ☐ Environmental services room
- (1) ☐ not shared with other patient care units
or departments
- (2) ☐ directly accessible* to NICU

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

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

2.2-2.8.8.15

Diagnostic Treatment & Service Areas:
(provided in same building)

- (1) ☐ respiratory therapy
- (2) ☐ blood gas lab
- (3) ☐ developmental therapy
- (4) ☐ social work
- (5) ☐ laboratory services
- (6) ☐ pharmacy services
- (7) ☐ radiology services
- (8) ☐ other ancillary services

2.2-2.8.8.16

- ☐ Lactation support space
- ☐ immediately accessible* to NICU for
lactation support & consultation
- (1) ☐ handwashing station
counter
- (2)(a) ☐ refrigeration & freezing
☐ immediately accessible* to NICU
- (2)(b) ☐ storage for pump & attachments &
educational materials
☐ immediately accessible* to NICU

2.2-2.8.8.17

- ☐ Infant feeding preparation facilities
- (1)(a) ☐ space for preparation & storage of
formula & additives to human milk &
formula provided in unit or other
location away from patient bedside
- (1)(b) ☐ work area & equipment layout
designed to provide for flow of
materials from clean to soiled to
maintain aseptic preparation space
- (2) ☐ infant feedings prepared on-site
☐ check if not included in project
- (a) ☐ feeding preparation room with
following spaces:
- ☐ anteroom or anteroom area
 - ☐ preparation area
 - ☐ Storage space
 - ☐ Cleanup area

Architectural Requirements**Building Systems Requirements**

- (3) _____ space for mixing additives into liquid formula or human milk provided in unit or in another location away from patient bedside
- (4) _____ provisions for human milk storage provided in designated space in infant feeding preparation room or in designated spaces on patient care unit
- (5) _____ Special Design Elements:
2.1-7.2.3.1(6) _____ surfaces in food preparation sanitation/ warewashing & serving areas be non-absorbent smooth & easily cleaned
- 2.1-7.2.3.2(3) _____ walls non-absorbent, smooth,
(a) _____ easily cleaned & light in color

SUPPORT AREAS FOR STAFF

- 2.2-2.8.9
2.2-2.8.9.1 _____ Staff lounge
_____ provided in or adjacent* to unit
_____ Staff locker room
_____ provided in or adjacent* to unit
_____ Staff toilet room
_____ provided in or adjacent* to unit
- 2.2-2.8.9.2 _____ On-call staff accommodations (may be
(2) located outside NICU)
- 2.2-2.6.9.4
(1) _____ accommodations for sleeping & rest
(a) _____ space for chair
(b) _____ space for bed
(2) _____ individually secured storage for personal items
(3) _____ communication system
(4) _____ at least one toilet, shower & handwashing station

Ventilation:

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

Ventilation:

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

SUPPORT AREAS FOR FAMILIES, PATIENTS & VISITORS

- 2.2-2.8.10.1 _____ Family & visitor lounge
2.1-2.10.1 _____ each patient care unit provides access to lounge for family & visitors
- 2.1-2.10.1.1(1) _____ accommodates at minimum 3 chairs & 1 wheelchair space
- 2.1-2.10.1.4 _____ designed to minimize impact of noise & activity on patient rooms & staff functions
- 2.2-2.8.10.1(2) _____ immediately accessible* to NICU

Communications:

- _____ Public communication services provided in each family & visitor lounge 2.1-2.10.1.6

Architectural Requirements

- 2.2-2.8.10.2
(3) ☐ Parent/infant room
☐ check if not included in project
 (only if all NICU rooms are single-infant rooms)
☐ provided in NICU that allows parents & infants extended private time together
 (1)(b) ☐ communication linkage with NICU staff
 (1)(d) ☐ sleeping facilities for at least one parent
 (1)(e) ☐ sufficient space for infant's bed & equipment

Building Systems Requirements

- Ventilation:
☐ Min. 4 air changes per hour Table 7.1
 Lighting:
☐ General lighting 2.1-8.3.4.3(1)
☐ Lighting for NICU bed (c)
☐ permits staff observation of patient
☐ minimizes glare
 Power:
☐ Min. 16 receptacles in total Table 2.1-1
☐ convenient to head of bed
 Nurse Call System:
☐ Patient station Table 2.1-2
☐ Staff assistance station
☐ Emergency call for each bed
 Medical Gases:
☐ 3 OX, 3 VAC, 3 MA per bed Table 2.1-3

- (1)(a) ☐ direct private access to sink, shower & toilet facilities

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

SPECIAL DESIGN ELEMENTS

- 2.2-2.8.7
 2.2-2.8.7.1 Architectural Details:
 (1)(a) ☐ ceilings easily cleanable & non-friable
 (1)(b) ☐ ceiling construction limit passage of particles from above ceiling plane into clinical environment
 (2) ☐ wall sound isolation complies with Table 1.2-6
 (3) ☐ floor sound isolation complies with Table 1.2-6
 2.2-2.8.7.2 Lighting:
 (1) ☐ indirect lighting & high-intensity lighting in NICU
 (2) ☐ color rendering index min. 80
☐ full-spectrum color index min. 55
☐ gamut area of no less than 65 & no greater than 100
 (3) ☐ controls be provided to enable lighting to be adjusted over individual patient care spaces
 (4) ☐ darkening for body transillumination is available
 (5)(a) ☐ no direct ambient lighting in infant care station

Architectural Requirements**Building Systems Requirements**

- (5)(b) _____ any direct ambient lighting outside infant care station is located or framed to avoid direct line of sight from infant to fixture
- (6) _____ lighting fixtures are cleanable
- 2.2-2.8.7.3 Noise Control:
 _____ infant rooms, staff work areas, family areas, staff lounge & sleeping areas meet room noise criteria in Table 1.2-5

***LOCATION TERMINOLOGY:**

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

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

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

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

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

- 2.1-7.2.2.1 NFPA 101, 18.2.3.4 _____ Aisles, corridors & ramps required for exit access in a hospital not less than 8'-0" in clear & unobstructed width

or

- _____ Detailed code review incorporated in Project Narrative

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

or

- _____ Detailed code review incorporated in Project Narrative

2.1-7.2.2.2 CEILING HEIGHT:

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

2.1-7.2.2.3 DOORS & DOOR HARDWARE:

- (1) Door Type:
 (a) _____ doors between corridors, rooms, or spaces subject to occupancy swing type or sliding doors

- (b) _____ sliding doors
 ☐ check if not included in project
 _____ manual or automatic sliding doors comply with NFPA 101
 _____ detailed code review incorporated in Project Narrative
 _____ no floor tracks

- (2) Door Opening:
 (a) _____ min. 45.5" clear door width for patient rooms
 _____ min. 83.5" clear door height for patient rooms

- (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

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
- 2.1-7.2.2.12 **NOISE CONTROL:**
- (1) ☐ Recreation rooms, exercise rooms, equipment rooms & similar spaces where impact noises may be generated are not located directly over patient bed areas
- 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
- 2.1-7.2.2.14 **DECORATIVE WATER FEATURES:**
- (1) ☐ No indoor unsealed water features
- (2) ☐ Covered fish tanks
☐ check if not included in project
☐ restricted to public 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

- 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:
☐ check if not included in project
☐ upholstered with impervious materials in patient treatment areas
- 2.1-7.2.4.3 ☐ Privacy curtains in patient rooms & other patient care areas are washable
☐ check if not included in project

- 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 Tables 7.1 are maintained for AII Rooms, PE 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 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

	<input type="checkbox"/> capacity of remaining source or sources is sufficient to provide for domestic hot water & heating for intensive care rooms		<input type="checkbox"/> exhaust discharge outlets with contaminated air located such that they reduce potential for recirculation of exhausted air back into building
Part 3/6.1.2.2	Central cooling systems greater than 400 tons (1407 kW) peak cooling load <input type="checkbox"/> check if <u>not</u> included in project <input type="checkbox"/> cooling sources sufficient to support owner's facility operation plan upon breakdown or routine maintenance of any one of cooling sources	Part 3/6.3.2.2	<input type="checkbox"/> exhaust discharge outlets with contaminated air is arranged to discharge to atmosphere in vertical direction at least 10'-0" above adjoining roof level <input type="checkbox"/> exhaust discharge outlets from AII rooms is located not less than 25 feet horizontally from outdoor air intakes, openable windows/doors & areas that are normally accessible to public
Part 3/6.2 Part 3/6.2.1	AIR-HANDLING UNIT (AHU) DESIGN: <input type="checkbox"/> AHU casing is designed to prevent water intrusion, resist corrosion & permit access for inspection & maintenance	Part 3/6.4	FILTRATION: <input type="checkbox"/> Two filter banks for inpatient care (see Table 6.4) <input type="checkbox"/> Filter Bank No. 1: MERV 7 <input type="checkbox"/> Filter Bank No. 2: MERV 14 <input type="checkbox"/> Each filter bank with efficiency of greater than MERV 12 is provided with differential pressure measuring device to indicate when filter needs to be changed
Part 3/6.3	OUTDOOR AIR INTAKES & EXHAUST DISCHARGES:	Part 3/6.4.1	<input type="checkbox"/> Filter Bank No. 1 is placed upstream of heating & cooling coils
Part 3/6.3.1 Part 3/6.3.1.1	Outdoor Air Intakes: <input type="checkbox"/> located min. of 25 ft from cooling towers & all exhaust & vent discharges <input type="checkbox"/> outdoor air intakes located such that bottom of air intake is at least 6'-0" above grade <input type="checkbox"/> air intakes located away from public access	Part 3/6.4.2	<input type="checkbox"/> Filter Bank No. 2 is placed downstream of all wet-air cooling coils & supply fan
Part 3/6.3.1.3	<input type="checkbox"/> intakes on top of buildings <input type="checkbox"/> check if <u>not</u> included in project <input type="checkbox"/> located with bottom of air intake min. 3'-0" above roof level	Part 3/6.5 Part 3/6.5.3	HEATING & COOLING SYSTEMS: <input type="checkbox"/> Radiant heating systems <input type="checkbox"/> check if <u>not</u> included in project <input type="checkbox"/> ceiling or wall panels with exposed cleanable surfaces or radiant floor heating are provided in AII room, PE room & burn unit
Part 3/6.3.1.4	<input type="checkbox"/> intake in areaway <input type="checkbox"/> check if <u>not</u> included in project <input type="checkbox"/> bottom of areaway air intake opening is at least 6'-0" above grade <input type="checkbox"/> bottom of air intake opening from areaway into building is at least 3'-0" above bottom of areaway	Part 3/6.7 Part 3/6.7.1	AIR DISTRIBUTION SYSTEMS: <input type="checkbox"/> pressure relationships required in tables 7.1 maintained in all modes of HVAC system operation <input type="checkbox"/> Spaces that have required pressure relationships are served by fully ducted return systems or fully ducted exhaust systems <input type="checkbox"/> Inpatient facilities are served by fully ducted return or exhaust systems
Part 3/6.3.2	Exhaust Discharges for Infectious Exhaust Air: <input type="checkbox"/> check if <u>not</u> included in project	Part 3/6.7.2	Air Distribution Devices: <input type="checkbox"/> supply air outlets comply with Table 6.7.2
Part 3/6.3.2.1	<input type="checkbox"/> ductwork within building is under negative pressure for exhaust of contaminated air (i.e. air from AII rooms)	Part 3/6.7.3	Smoke Barriers: <input type="checkbox"/> HVAC zones coordinated with compartmentation to minimize ductwork penetrations of fire & smoke barriers.

Part 3/6.8 ENERGY RECOVERY SYSTEMS:

☐ check if not included in project
Part 3/6.8.1 ☐ Located upstream of Filter Bank No. 2Part 3/6.8.2 ☐ AII room exhaust systems or combination AII/PE rooms are not used for energy recoveryPart 3/6.8.3 ☐ Energy recovery systems with leakage potential
☐ check if not included in project

☐ arranged to minimize potential to transfer exhaust air directly back into supply airstream

☐ designed to have no more than 5% of total supply airstream consisting of exhaust air

Part 3/7 SPACE VENTILATION

Part 3/7.1.a ☐ Spaces ventilated according to Table 7.1Part 3/7.1.a.1 ☐ Air movement is from clean to less-clean areasPart 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 airflowPart 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 a single space
☐ provides min. MERV 6 filter located upstream of any cold surface so that all of air passing over cold surface is filtered

Part 3/7.2 ADDITIONAL ROOM-SPECIFIC REQUIREMENTS:

Part 3/7.2.1 Airborne Infection Isolation (AII) Rooms

☐ check if not included in project

☐ AII rooms have permanently installed device and/or mechanism to constantly monitor differential air pressure between room & corridor
☐ Local visual means is provided to indicate whenever negative differential pressure is not maintained
☐ Air from AII room is exhausted directly to outdoors

Part 3/7.2.1

☐ Exhaust air from AII rooms, associated anterooms & toilet rooms is discharged directly to outdoors without mixing with exhaust air from any other non-AII room or exhaust system

☐ Exhaust air grille or register in patient room is located directly above patient bed on ceiling or on wall near head of bed

☐ Anteroom

☐ check if not included in project

☐ AII room is at negative pressure with respect to anteroom

☐ Anteroom is at negative pressure with respect to corridor

Part 3/7.2.2

Protective Environment (PE) Rooms

☐ check if not included in project

Part 3/7.2.2

☐ Supply air diffusers are located above patient bed

☐ Exhaust grilles or registers are located near patient room door.

☐ PE rooms have permanently installed device to constantly monitor differential air pressure between room & corridor local

☐ Visual means is provided to indicate whenever positive differential pressure is not maintained

Part 3/7.2.3

Combination Airborne Infectious Isolation/ Protective Environment Room (AII/PE)

☐ check if not included in project

☐ Supply air diffusers are located above patient bed

☐ Exhaust grilles or registers are located near patient room door.

☐ Anteroom

☐ check if not included in project

☐ anteroom is at positive pressure with respect to both AII/PE room & corridor or common space
or
☐ anteroom is at negative pressure with respect to both AII/PE room & corridor or common space

☐ First device monitors pressure differential between AII/PE room & anteroom

☐ Second device monitors pressure differential between anteroom & corridor or common space

☐ Local visual means are provided to indicate whenever differential pressures are not maintained

2.1-8.3 ELECTRICAL SYSTEMS**2.1-8.3.2.2 Panelboards:**

- (1) ☐ panelboards serving life safety branch circuits serve floors on which they are located & floors immediately above & below
- (2) ☐ panelboard critical branch circuits serve floors on which they are located
- (3) ☐ panelboards not located in exit enclosures or exit passageways

2.1-8.3.2.3 Ground-Fault Circuit Interrupters in Critical Care Areas:

- ☐ check if not included in project
- (2) ☐ each receptacle individually protected by single GFCI device

2.1-8.3.3 POWER-GENERATING & -STORING EQUIPMENT**2.1-8.3.3.1** ☐ Essential electrical system or emergency electrical power

- (1) ☐ essential electrical system complies with NFPA 99
- (2) ☐ emergency electrical power complies with NFPA 99

2.1-8.3.4 LIGHTING:

- 2.1-8.3.4.3(2)** ☐ Patient care unit corridors have general illumination with provisions for reducing light levels at night

2.1-8.3.5 ELECTRICAL EQUIPMENT:

- 2.1-8.3.5.1** ☐ Handwashing sinks & scrub sinks that depends on building electrical service for operation are connected to essential electrical system
- ☐ check if not included in project

2.1-8.3.6 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

(1)(a)

(2)(b)

(1)(b)

(1)(a)

(4)

(5)

2.1-8.4.2.5

(2)

(3)(a)

(3)(c)

(3)(b)

(4)(a)

2.1-8.4.2.6

(1)(a)

Hemodialysis/Hemoperfusion Water Distribution:

- ☐ check if not included in project
- ☐ separate treated water distribution system
- ☐ outlet at each individual hemodialysis treatment bay
- ☐ outlet at hemodialysis equipment repair area
- ☐ outlet at dialysate preparation area

or

- ☐ dialysis equipment includes sufficient water treatment provisions for use of domestic cold water
- ☐ drainage system independent from tap water drainage
- ☐ liquid waste & disposal system for hemodialysis treatment area are designed to minimize odor & prevent backflow
- ☐ hemodialysis distribution piping is readily accessible* for inspection & maintenance

Heated Potable Water Distribution Systems:

- ☐ heated potable water distribution systems serving patient care areas are under constant recirculation
- ☐ non-recirculated fixture branch piping max. length 25'-0"
- ☐ no installation of dead-end piping (except for empty risers mains & branches for future use)
- ☐ any existing dead-end piping is removed
- ☐ check if not included in project
- ☐ water-heating system supplies water at temperatures & amounts indicated in Table 2.1-4

Drainage Systems:

- ☐ drainage piping installed above ceiling of or exposed in electronic data processing areas & electric closets
- ☐ check if not included in project
- ☐ special provisions to protect space below from leakage & condensation

- (1)(b) _____ drip pan for drainage piping above ceiling of sensitive area
☐ check if not included in project
 _____ accessible
 _____ overflow drain with outlet located in normally occupied area

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 that will reduce risk of splashing to areas for direct patient care & medication preparation
- (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) _____ faucet water discharge point min. 10" above bottom of basin
- (7) _____ anchored so that allowable stresses are not exceeded where vertical or horizontal force of 250 lbs. is applied
- (8) _____ sinks used by staff & public have fittings that can be operated without using hands (may be single-lever or wrist blade devices)
- (a) _____ blade handles
☐ check if not included in project
 _____ at least 4 inches in length
 _____ provide clearance required for operation
- (b) _____ sensor-regulated water fixtures
☐ check if not included in project
 _____ meet user need for temperature & length of time water flows
 _____ designed to function at all times and during loss of normal power

2.1-8.4.3.4 Ice-Making Equipment:

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

2.1-8.4.3.5

Clinical Flushing-Rim Sinks:

- ☐ check if not included in project
- (1) _____ trimmed with valves that can be operated without hands (may be single-lever or wrist blade devices)
- (a) _____ handles are at least 6 in. long
- (b) _____ integral trap wherein upper portion of water trap provides visible seal
- (2) _____

2.1-8.4.3.7

Bedpan-Rinsing Devices:

- (1) _____ bedpan-rinsing devices provided in each inpatient toilet room
- (2) _____ use cold water only

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) _____ Nurse call systems report to attended location with electronically supervised visual & audible annunciation as indicated in Table 2.1-2
- (4) _____ Call system complies with UL 1069 "Standard for Hospital Signaling & Nurse Call Equipment"
- (5) _____ Wireless nurse call system
☐ check if not included in project
 _____ complies with UL 1069

2.1-8.5.1.2

Patient Call Stations:

- (2)(b) _____ reset switch for canceling call
- (3)(a) _____ visible signal in corridor at patient's door
- Multi-Corridor Patient Areas:
☐ check if not included in project
 _____ additional visible signals at corridor intersections

2.1-8.5.1.5

- _____ Emergency call stations are equipped with continuous audible or visual confirmation to person who initiated the code call

2.1-8.6.2

ELECTRONIC SURVEILLANCE SYSTEMS

- ☐ check if not included in project

2.1-8.6.2.2

- _____ monitoring devices are located so they are not readily observable by general public or patients

2.1-8.6.2.3

- _____ electronic surveillance systems receive power from essential electrical system