**COMPLIANCE CHECKLIST**

**IP24\_Hyperbaric Suite**

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:

1. NFPA 101 Life Safety Code (2012) and applicable related standards contained in the appendices of the Code
2. State Building Code (780 CMR)
3. Accreditation requirements of The Joint Commission
4. CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities
5. USP 797 & Regulations of the Massachusetts Board of Registration in Pharmacy
6. Occupational Safety & Health Standards (OSHA)
7. Accessibility Guidelines of the Americans with Disabilities Act (ADA)
8. Architectural Access Board Regulations (521 CMR)
9. 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. |

1. All room functions marked with "X" must be shown on the plans with the same name labels as in this checklist.
2. 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.
3. 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”.
4. Requirements referenced with “FI” result from formal interpretations from the FGI Interpretations Task Group.
5. 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.

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| --- | --- | --- |
| 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** |  |
| --- | --- | --- | --- |
| 2.2-3.13 | **HYPERBARIC SUITE** |  |  |
|  |  |  |  |
| 2.2-3.13.1 | **HYPERBARIC TREATMENT AREA** |  |  |
| 2.2-3.13.1.1(1)  | (designated for clinical hyperbaric oxygen therapy) |  |  |
|  |  |  |  |
| 2.2-3.13.1.1(2)  | \_\_\_ Hyperbaric treatment area meets requirements of “Hyperbaric Facilities” chapter in NFPA 99 |  |  |
|  |  |  |  |
| 2.2-3.13.1.2(1)  | \_\_\_ Multiplace (Class “A” Chamber) facilities[ ]  check if not included in project  |  |  |
| (a)  | \_\_\_ space provided to house Class “A” chambers & supporting equipment accommodate equipment manufacturer’s technical specifications\_\_\_ manufacturer’s technical specifications have been submitted to DPH Plan Review |  |  |
| (b)  | \_\_\_ min. clearance 3’-0” around chamber |  |  |
|  | \_\_\_ min. clearance 8’-0” for stretcher or gurney access area in front of chamber |  |  |
|  | \_\_\_ min. clearance 5’-0” for wheelchair access area in front of chamber entries |  |  |
| (c) | \_\_\_ entries designed for wheelchairs or gurneys provided with access ramps that are flush with chamber entry doorway |  |  |
|  | \_\_\_ min. 3’-0” wide chamber entries not designed for gurney/stretcher access  |  |  |
|  |  |  |  |
| 2.2-3.13.1.2(2)  | \_\_\_ Monoplace (Class “B” Chamber) facilities |  |  |
| (a)  | \_\_\_ space provided to house Class “B” chambers & supporting equipment accommodate equipment manufacturer’s technical specifications\_\_\_ manufacturer’s technical specifications have been submitted to DPH Plan Review |  |  |
| (b)  | \_\_\_ min. clearance 2’-0” around chamber |  |  |
|  | \_\_\_ min. clearance 3’-0” between control sides of two chambers[ ]  check if not included in project (only if one chamber provided) |  |  |
|  | \_\_\_ min. passage 12” at foot end of each chamber & any wall or obstruction |  |  |
|  | \_\_\_ min. clearance 8’-0” in front of chamber entry designed for gurney or stretcher access |  |  |
| (c)  | \_\_\_ oxygen service valve provided for each chamber |  |  |
|  |  |  |  |
| 2.2-3.13.42.2-3.13.4.1(3) | **PRE-PROCEDURE PATIENT CARE AREA**[ ]  check if not included in project (only if facility has two or fewer Class “B” hyperbaric chambers) |  |  |
| 2.2-3.13.4.1 |  |  |  |
| 2.2-3.13.4.1(1)  | \_\_\_ Patient holding area \_\_\_ under staff control \_\_\_ out of traffic flow from chamber \_\_\_ does not obstruct access to exits from hyperbaric suite |  |  |
| 2.2-3.13.4.1(2)  | \_\_\_ Gurney patients in holding area be out of direct line of normal traffic | Medical Gases:\_\_\_ 2 OX, 2 VAC | Table 2.1-3 |
|  |  |  |  |
| 2.2-3.13.4.2 |  Space Requirements: \_\_\_ patient holding area sized to accommodate inpatients on gurneys or beds |  |  |
|  |  |  |  |
| 2.2-3.13.8 | **SUPPORT AREAS FOR HYPERBARIC SUITE** |  |  |
| 2.2-3.13.8.1(2) | (may be shared with wound care department) |  |  |
| 2.2-3.13.8.2 | \_\_\_ Reception/control desk |  |  |
|  |  |  |  |
| 2.2-3.13.8.4 | \_\_\_ Consultation/treatment room |  |  |
| 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 w/ min. clearance 3’‑0” at each side & at foot of exam table  | Lighting:\_\_\_ Portable or fixed exam light | 2.1‑8.3.4.3(3)  |
|  | \_\_\_ room arrangement (layout #1) shown in the plans | Power:\_\_\_ Min. 8 receptacles in total | Table 2.1-1 |
| (2)(b)  | \_\_\_ exam table, recliner or chair is placed at angle closer to one wall  | \_\_\_ Min. 4 receptacles convenient to head of gurney or bed |  |
|  | than another or against wall to accommodate type of patient being served |  |  |
|  | [ ]  check if not included in project\_\_\_ room arrangement (layout #2) shown in the plans |  |  |
| 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 |  |  |
|  |  |  |  |
| 2.2-3.12.8.2 | \_\_\_ Nurse station \_\_\_ located in treatment area |  |  |
| (1)  | \_\_\_ designed to provide visual observation of all patient care stations |  |  |
| (2)  | \_\_\_ located out of direct line of traffic |  |  |
| 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\* |  |  |
|  |  |  |  |
| 2.2-3.12.8.8 |  Medication Safety Zone: |  |  |
| 2.1‑2.8.8.2(1)  | \_\_\_ medication preparation room |  |  |
| (a)  | \_\_\_ under visual control of nursing staff | Ventilation:  |  |
| (b) | \_\_\_ work counter | \_\_\_ Min. 4 air changes per hour | Table 7-1 |
|  | \_\_\_ handwashing station | Lighting:  |  |
|  | \_\_\_ lockable refrigerator | \_\_\_ Task lighting | 2.1‑2.8.8.1(2)(d) |
|  | \_\_\_ locked storage for controlled drugs |  |  |
|  | \_\_\_ sharps containers[ ]  check if not included in project  |  |  |
| (c)  | \_\_\_ self‑contained medication-dispensing unit [ ]  check if not included in project  |  |  |
|  | \_\_\_ room designed with space to prepare medications |  |  |
|  |  |  |  |
| 2.2-3.12.8.9 | \_\_\_ Nourishment area or room | Ventilation: |  |
| 2.1‑2.8.9.2(1)  | \_\_\_ handwashing station | \_\_\_ Min. 2 air changes per hour | Table 7-1 |
| 2.1‑2.8.9.2(2)  | \_\_\_ work counter |  |  |
| 2.1‑2.8.9.2(3)  | \_\_\_ refrigerator |  |  |
| 2.1‑2.8.9.2(4)  | \_\_\_ microwave |  |  |
| 2.1‑2.8.9.2(5)  | \_\_\_ storage cabinets |  |  |
| 2.1‑2.8.9.2(6)  | \_\_\_ space for temporary storage of food service implements |  |  |
| 2.1‑2.8.9.3 | \_\_\_ provisions & space are included for separate temporary storage of unused & soiled meal trays |  |  |
| 2.2-3.12.8.9(2)  | \_\_\_ provisions for drinking water for patient use provided separate from handwashing station |  |  |
|  |  |  |  |
| 2.2-3.12.8.11 | \_\_\_ Clean workroom or clean supply room |  |  |
| 2.1‑2.8.11.2 | \_\_\_ clean workroom \_\_\_ used for preparing patient care items | Ventilation:\_\_\_ Min. 4 air changes per hour | Table 7-1 |
| (1)  | \_\_\_ work counter | \_\_\_ Positive pressure |  |
| (2)  | \_\_\_ handwashing station |  |  |
| (3)  | \_\_\_ storage facilities for clean & sterile supplies **or** |  |  |
| 2.1‑2.8.11.3 | \_\_\_ clean supply room  | Ventilation:  |  |
|  | \_\_\_ used only for storage & holding as part of system for distribution of clean & sterile supplies | \_\_\_ Min. 4 air changes per hour\_\_\_ Positive pressure | Table 7-1 |
|  |  |  |  |
| 2.2-3.12.8.12 | \_\_\_ Soiled workroom or soiled holding room |  |  |
| 2.1‑2.8.12.2 | \_\_\_ soiled workroom |  |  |
| (1)(a)  | \_\_\_ handwashing station | Ventilation:\_\_\_ Min. 10 air changes per hour | Table 7-1 |
| (1)(b)  | \_\_\_ flushing‑rim clinical service sink with bedpan‑rinsing device or equivalent flushing‑rim fixture | \_\_\_ Exhaust\_\_\_ 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 |  |
|  |  |  |  |
| 2.2-3.12.8.13(1)  | \_\_\_ Clean linen storage |  |  |
| (1)  | \_\_\_ stored in clean workroom**or** \_\_\_ covered cart distribution system |  |  |
| (2)  | \_\_\_ storage of clean linen carts in designated corridor alcoves, clean workroom or closets**or** |  |  |
| 2.2-3.13.8.13(1)  | \_\_\_ separate supply storage room  (may be shared with another department) | Ventilation:\_\_\_ Min. 2 air changes per hour \_\_\_ Positive pressure | Table 7-1 |
| 2.2-3.12.8.13(3)  | \_\_\_ Gurney/wheelchair storage space |  |  |
|  |  |  |  |
| 2.2-3.13.8.13(4)  | \_\_\_ Gas cylinder room provided for Class “A” facilities[ ]  check if not included in project (only if bariatric chambers are restricted to Class “B”) |  |  |
| (a)  | \_\_\_ space to house eight (H) cylinders \_\_\_ space to house two gas manifolds consisting of at least two (H) cylinders on each manifold |  |  |
|  |  |  |  |
| 2.2-3.13.8.14 | \_\_\_ Environmental services room |  |  |
| (1)  | \_\_\_ immediately accessible\* to hyperbaric suite | Ventilation:\_\_\_ Min. 10 air changes per hour | Table 7-1 |
| 2.1‑2.8.14.2(1)  | \_\_\_ service sink or floor‑mounted mop sink | \_\_\_ Exhaust |  |
| 2.1‑2.8.14.2(2)  | \_\_\_ provisions for storage of supplies & housekeeping equipment | \_\_\_ Negative pressure\_\_\_ No recirculating room units |  |
| 2.1‑2.8.14.2(3)  | \_\_\_ handwashing station **or** \_\_\_ hand sanitation station |  |  |
|  |  |  |  |
| 2.2-3.13.8.16 | \_\_\_ Compressor room |  |  |
| (1)  | \_\_\_ large enough to house chamber compressors, accumulator tanks & fire suppression system |  |  |
|  |  |  |  |
| 2.2-3.13.9 | **SUPPORT AREAS FOR STAFF** |  |  |
|  | \_\_\_ Staff toilet room\_\_\_ handwashing station \_\_\_ immediately accessible\* to hyperbaric suite | Ventilation:\_\_\_ Min. 10 air changes per hour\_\_\_ Exhaust\_\_\_ Negative pressure\_\_\_ No recirculating room units | Table 7-1 |
| 2.2-3.13.10 | **SUPPORT AREAS FOR PATIENTS** |  |  |
| 2.2-3.13.10.1(4) | \_\_\_ Patient waiting area[ ]  check if not included in project (only in facilities with two or fewer Class “B” hyperbaric chambers) |  |  |
| (1)  | \_\_\_ screened from unrelated traffic \_\_\_ under staff control \_\_\_ separated from hyperbaric suite by door |  |  |
|  |  |  |  |
| (3)  |  Hyperbaric Suite Routinely Used for Inpatients: [ ]  check if not included in project  |  |  |
|  | \_\_\_ outpatient waiting & inpatient holding areas separated & screened to provide visual & acoustic privacy between outpatients and inpatients |  |  |
|  |  |  |  |
| 2.2-3.13.10.2 | \_\_\_ Patient toilet room \_\_\_ handwashing station \_\_\_ directly accessible\* to hyperbaric suite | Ventilation:\_\_\_ Min. 10 air changes per hour\_\_\_ Exhaust\_\_\_ Negative pressure\_\_\_ No recirculating room units | Table 7-1 |
| 2.2-3.13.10.3 | \_\_\_ Patient changing rooms |  |  |
| (1)(a)  | \_\_\_ seat or bench made of non-absorbable material |  |  |
| (1)(b)  | \_\_\_ mirror |  |  |
| (1)(c)  | \_\_\_ provisions for hanging patients clothing \_\_\_ provisions for securing valuables |  |  |
| (2)  | \_\_\_ at least one changing room accommodates wheelchair patients |  |  |
|  |  |  |  |

\*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** |
|  |  |
| 2.1‑7.2.2.1NFPA 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(1)(a)(b) | DOORS & DOOR HARDWARE:Door Type:\_\_\_ doors between corridors, rooms, or spaces subject to occupancy swing type or 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)(a) | Door Opening:\_\_\_ min. 45.5” clear door width for diagnostic/treatment areas\_\_\_ min. 83.5” clear door height for diagnostic/treatment areas |
| (b) | \_\_\_ swinging doors for personnel use in addition to sliding doors[ ]  check if not included in project\_\_\_ min. clear width 34.5”  |
|  |  |
| (3)  |  Door Swing: |
| (a)  | \_\_\_ doors do not swing into corridors except doors to non‑occupiable spaces (e.g. environmental services rooms & electrical closets) & doors with emergency breakaway hardware |
|  |  |
| (4)  | \_\_\_ Lever hardware or push/pull latch hardware  |
|  |  |
| (5)  |  Doors for Patient Toilet Facilities: |
| (a) | \_\_\_ two separate doors**or** |
|  | \_\_\_ door that swings outward **or** |
|  | \_\_\_ door equipped with emergency rescue hardware (permits quick access from outside the room to prevent blockage of the door)**or** |
|  | \_\_\_ sliding door other than pocket door |
|  |  |
| (b)  | \_\_\_ toilet room opens onto public area or corridor [ ]  check if not included in project  |
|  | \_\_\_ visual privacy is maintained |
|  |  |
| 2.1‑7.2.2.7 | GLAZING MATERIALS: \_\_\_ Glazing within 1 foot 6 inches of floor[ ]  check if not included in project  |
|  | \_\_\_ must be safety glass, wire glass or plastic break‑resistant material |
|  |  |
| 2.1‑7.2.2.8 | HANDWASHING STATIONS: |
| (1)(c)  | \_\_\_ Handwashing stations in patient care areas located so they are visible & unobstructed |
| (3)  |  |
| (a)  | \_\_\_ Handwashing station countertops made of porcelain, stainless steel, solid‑surface materials or impervious plastic laminate assembly |
| (b)  | \_\_\_ Countertops substrate [ ]  check if not included in project \_\_\_ marine‑grade plywood (or equivalent material) with impervious seal |
| (4)  | \_\_\_ Handwashing station casework [ ]  check if not included in project \_\_\_ designed to prevent storage beneath sink |
| (5)  | \_\_\_ Provisions for drying hands [ ]  check if not included in project (only in the case of hand scrub facilities) |
| (a)  | \_\_\_ hand‑drying device does not require hands to contact dispenser |
| (b)  | \_\_\_ hand‑drying device is enclosed to protect against dust or soil & to ensure single‑unit dispensing |
| (6)  | \_\_\_ liquid or foam soap dispensers |
| 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: |
| (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 |

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| 2.1‑8.2 | **HEATING VENTILATION & AIR‑CONDITIONING (HVAC) SYSTEMS** |
|  |  |
| Part 3/6.1 | UTILITIES: |
| 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  |
|  |  |
| 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 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.aPart 3/7.1.a.1 | \_\_\_ Spaces ventilated according to Table 7-1\_\_\_ 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 |

|  |  |
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| 2.1‑8.3 | **ELECTRICAL SYSTEMS** |
| 2.1‑8.3.2 | **ELECTRICAL DISTRIBUTION & TRANSMISSION** |
| 2.1‑8.3.2.2 |  Panelboards: |
| (1)  | \_\_\_ panelboards serving life safety branch circuits serve floors on which they are located & floors immediately above & below |
| (2)  | \_\_\_ panelboard critical branch circuits serve floors on which they are located |
| (3)  | \_\_\_ panelboards not located in exit enclosures or exit passageways |
| 2.1-8.3.3 | **POWER-GENERATING & -STORING EQUIPMENT** |
| 2.1-8.3.3.1 | \_\_\_ Essential electrical system or emergency electrical power |
| (1)  | \_\_\_ essential electrical system complies with NFPA 99 |
| (2)  | \_\_\_ emergency electrical power complies with NFPA 99 |
| 2.1‑8.3.4 | **LIGHTING** |
| 2.1-8.3.4.1(1)  | \_\_\_ Luminaires in patient areas have smooth, cleanable, impact-resistant lenses concealing light source |
| 2.1-8.3.4.1(2)  | \_\_\_ Luminaires designed to dissipate heat such that touchable surfaces will not burn occupants or ignite materials. |
| (7) | \_\_\_ Uplight fixtures installed in patient care areas are covered |
|  |  |
| 2.1‑8.3.5 | **ELECTRICAL EQUIPMENT** |
| 2.1‑8.3.5.1 | \_\_\_ Handwashing sinks & scrub sinks that depends on building electrical service for operation are connected to essential electrical system |
| 2.1‑8.3.5.2 | \_\_\_ Electronic health record system servers & centralized storage provided with uninterruptible power supply |
| 2.1‑8.3.6 | **ELECTRICAL RECEPTACLES** |
| 2.1‑8.3.6.1 |  Receptacles In Corridors: |
| (1)  | \_\_\_ duplex‑grounded receptacles for general use installed 50’‑0” apart or less in all corridors \_\_\_ duplex‑grounded receptacles for general use installed within 25’‑0” of corridor ends |
|  |  |
| 2.1‑8.3.6.3 |  Essential Electrical System Receptacles: |
| (1)  | \_\_\_ cover plates for electrical receptacles supplied from essential electrical system are distinctively colored or marked for identification |
| (2)  | \_\_\_ same color is used throughout facility |
|  |  |
| 2.1‑8.4 | **PLUMBING SYSTEMS** |
| 2.1‑8.4.2 |  Plumbing & Other Piping Systems: |
| 2.1‑8.4.2.1(3)  | \_\_\_ no plumbing piping exposed overhead or on walls where possible accumulation of dust or soil may create cleaning problem  |
| 2.1‑8.4.2.5 |  Heated Potable Water Distribution Systems: |
| (2)  | \_\_\_ heated potable water distribution systems serving patient care areas are under constant recirculation \_\_\_ non‑recirculated fixture branch piping does not exceed 25’‑0” in length |
| (3)(a) (3)(c) | \_\_\_ 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 |
| (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) (a) | \_\_\_ trimmed with valves that can are operated without hands (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 |
|  |  |
| 2.1‑8.5.1 | **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](http://www.madcad.com/library/230687/664174/#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 |
|  |  |