

COMPLIANCE CHECKLIST

IP20: Respiratory Therapy

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 2014 Edition of the FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities. 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 (2000) and applicable related standards contained in the appendices of the Code
- State Building Code (780 CMR)
- Joint Commission on the Accreditation of Health Care Organizations
- CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Facilities
- USP 797
- 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 Part II of the 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 symbols, unless otherwise directed in the checklist. If a functional space is not affected by a renovation project, the symbol "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.

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).

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, and waste anesthesia gas disposal outlets (if required) are identified respectively by the abbreviations "OX", "VAC", "MA", & "WAGD".
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.

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

2.2-3.9

RESPIRATORY THERAPY

2.2-3.9.2

LOCATIONS FOR COUGH-INDUCING & AEROSOL-GENERATING PROCEDURES

check if not included in project

2.2-3.9.2.1

Booths or special enclosures

Ventilation:

- Discharge with HEPA filters
- Exhaust directly to outside

2.2-3.9.2.2

ventilated booth

- Min. 12 air changes per hour
- Min. exhaust airflow 50 CFM

or

2.2-3.9.2.3

ventilated therapy room
 meets ventilation requirements for airborne infection control

- Min. 12 air changes per hour Table 7.1
- Exhaust
- Negative pressure
- No recirculating room units

2.2-3.9.3

OUTPATIENT TESTING & DEMONSTRATION SERVICES

check if not included in project

2.2-3.9.3.1

Reception & control station

2.2-3.9.3.2

Room for patient testing, education & demonstration

2.1-3.2.2.1

Space Requirements:

Ventilation:

(1) min. clear floor area of 120 sf with min. clear dimension of 10'-0"

Min. 6 air changes per hour

(2)

(a)

room size permits min. clearance of 3'-0" at each side & at foot of exam table

room arrangement permits placement of exam table, recliner, or chair at an angle, closer to one wall than another, or against wall to accommodate type of patient being served

2.1-3.2.2.2

Room Features:

(1)

examination light

(2)

storage for supplies

(3)

accommodations for written or electronic documentation

(4)

space for visitor's chair

(5)

handwashing station

2.2-3.9.3.3

Patient waiting area
 provision for wheelchairs

2.2-3.9.3.4

Patient toilets & handwashing stations

Ventilation:

- Min. 10 air changes per hour Table 7.1
- Exhaust

Architectural Requirements

Building Systems Requirements

- 2.2-3.9.6 **SUPPORT AREAS FOR RESPIRATORY THERAPY SERVICES**
- 2.2-3.9.6.1 (1) ___ Reception & control station (may be combined with office & clerical space)
 ___ permits visual control of waiting & activity areas
- 2.2-3.9.6.3 ___ Office & clerical space
- 2.2-3.9.6.10 (2) ___ Facilities for cleaning & decontaminating respiratory equipment
 ___ independent of handwashing stations
 ___ dedicated reprocessing room
 check if not included in project
- (a) ___ room arranged to provide soiled-to-clean workflow
- (b) ___ work counters for drop-off, soaking tubs & pasteurization units
 ___ documentation area
 ___ handwashing station
 ___ large sink for washing instruments
- (3) ___ appropriate local exhaust ventilation
- 2.2-3.9.6.11 ___ Equipment & supply storage

- Ventilation:
- ___ 10 air changes per hour Table 7.1
- ___ Exhaust
- ___ Negative pressure

- 2.2-3.9.7 **SUPPORT AREAS FOR STAFF**
- 2.2-3.9.7.2 ___ Staff toilet room
 ___ located in respiratory service area
- 2.2-3.9.7.3 ___ Staff storage
 ___ locking closets or cabinets in vicinity of each work area for securing staff personal effects

- Ventilation:
- ___ Min. 10 air changes per hour Table 7.1
- ___ Exhaust

Architectural Details & MEP Requirements

2.1-7.2.2 ARCHITECTURAL DETAILS

- 2.1-7.2.2.1 NFPA 101 ___ Aisles, corridors & ramps required for exit access in a hospital not less than 8'-0" in clear & unobstructed width
- or**
- ___ Code Review Sheet establishing compliance with NFPA 101 has been submitted
- ___ Aisles, corridors & ramps in adjunct areas not intended for the housing, treatment, or use of inpatients not less than 44" in clear width

- 2.1-7.2.2.2 CEILING HEIGHT:
- (1) ___ Min. ceiling height 7'-6" in corridors & normally unoccupied spaces
- (4) ___ Min. height 7'-6" above floor of suspended tracks, rails & pipes located in traffic path for patients in beds and/or on stretchers
- ___ Min. ceiling height 7'-10" in other areas
- 2.1-7.2.2.3 DOORS & DOOR HARDWARE:
- (1) (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
 ___ code review sheet attached
 ___ no floor tracks

- (2)
 - (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
- (3)
 - min. clear width 34.5"
 - Doors do not swing into corridors (except doors to non-occupiable spaces & doors with emergency breakaway hardware)
- (4)
 - (b)
 - Lever hardware
- (5)
 - Doors for patient toilet facilities
- (a)
 - 2 doors separated by horizontal distance equal to one-half length of max. diagonal room dimension
 - or**
 - door that swings outward
 - or**
 - door equipped with emergency rescue hardware
 - or**
 - (b)
 - sliding door
 - toilet room door opening in public area or corridor maintains visual privacy
- 2.1-7.2.2.7 GLAZING MATERIALS:
 - (4)
 - Glazing within 18" of floor
 - check if not included in project
 - safety glass, wire glass or plastic break-resistant material
- 2.1-7.2.2.8 HANDWASHING STATIONS:
 - (1)
 - Handwashing stations in patient care areas located to be visible & unobstructed
 - (3)
 - Anchoring suitable for vertical or horizontal force of 250 lbs.
 - (4)
 - Handwashing Station Countertops:
 - check if not included in project
 - (a)
 - porcelain, stainless steel or solid surface materials
 - (b)
 - plastic laminate countertops
 - check if not included in project
 - substrate marine-grade plywood (or equivalent) with impervious seal
 - (5)
 - Designed to prevent storage beneath sink
 - (6)
 - provisions for drying hands

- (a)
 - hand-drying device does not require hands to contact dispenser
- (d)
 - (7)
 - directly accessible* to sinks
 - Liquid or foam soap dispensers
- 2.1-7.2.2.9 GRAB BARS:
 - (2)
 - Grab bars anchored to sustain concentrated load of 250 lbs.
- 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)
 - Smooth non-textured surface free of rough edges
 - (5)
 - Eased edges & corners
 - (6)
 - Finishes cleanable
- 2.1-7.2.2.11 RADIATION PROTECTION:
 - check if no radiation emitting equipment is included in project
 - Protection for X-ray & Gamma-ray installations are shown in the plans
 - Documentation for radiation protection has been submitted separately to the DPH Radiation Control Program
- 2.1-7.2.2.12 NOISE CONTROL:
 - (2)
 - Partitions, floors & ceiling construction in patient areas conform to Table 1.2-6
- 2.1-7.2.3 SURFACES**
 - 2.1-7.2.3.1 FLOORING & WALL BASES:
 - (1)
 - Selected flooring surfaces cleanable & wear-resistant for location
 - (2)
 - Smooth transitions between different flooring materials
 - (3)
 - Flooring surfaces, including those on stairways, stable, firm & slip-resistant
 - (b)
 - Carpet
 - check if not included in project
 - provides stable & firm surface
 - (4)
 - Floors & wall bases of soiled holding rooms, toilet rooms & other wet cleaned areas are not physically affected by cleaning solutions
 - 2.1-7.2.3.2 WALLS & WALL PROTECTION:
 - (1)
 - Washable wall finishes
 - (a)
 - Wall finishes near plumbing fixtures smooth, scrubbable & water-resistant
 - (b)
 - Wall finishes near plumbing fixtures smooth, scrubbable & water-resistant

- (2) Monolithic wall surfaces in areas routinely subjected to wet spray or splatter
 - (5) No sharp, protruding corners
 - (6) Wall protection devices & corner guards durable & scrubbable
- 2.1-7.2.3.3 CEILINGS:
- (1) Ceilings in areas occupied by patients, in clean rooms & soiled rooms:
 - (a) cleanable with routine housekeeping equipment
 - (b) acoustic & lay-in ceilings
 - check if not included in project
 - do not create ledges or crevices

2.1-8.2 **HEATING, VENTILATION, & AIR-CONDITIONING (HVAC) SYSTEMS**

- 4/6.3.1 Outdoor Air Intakes:
- 4/6.3.1.1 Located min. 25 feet from cooling towers & all exhaust & vent discharges
 - Bottom of air intake is at least 6'-0" above grade
 - 4/6.3.1.2 Roof Mounted Air Intakes:
 - check if not included in project
 - bottom min. 3'-0" above roof level
 - 4/6.3.2 Exhaust Discharges for Contaminated Exhaust Air:
 - check if not included in project
 - Ductwork under negative pressure (except in mechanical room)
 - Discharge in vertical direction at least 10'-0" above roof level
 - Located not less than 10'-0" horizontally from air intakes & operable windows/doors
 - 4/6.4 Filtration:
 - Filter banks conform to Table 6.4
 - 4/6.4.1 Filter Bank #1 placed upstream of heating & cooling coils
 - 4/6.4.2 Filter Bank No. 2 installed downstream of cooling coils & supply fan
 - 4/6.7 Air Distribution Systems
 - 4/6.7.1 Ducted return or exhaust systems in spaces listed in Table 7.1 with required pressure relationships
 - Ducted return or exhaust systems in inpatient care areas

- 4/6.7.3 Smoke & Fire barriers:
 - HVAC zones coordinated with compartmentation to minimize ductwork penetrations of fire & smoke barriers
- 4/6.8 Energy Recovery Systems:
 - 4/6.8.2 Exhaust systems serving potentially contaminated rooms are not used for energy recovery
- 4/6.9 Duct Lining:
 - No duct lining in ductwork located downstream of Filter Bank #2
- 4/7. Space Ventilation:
 - 4/7.1 Spaces ventilated per Table 7.1
 - Air movement from clean areas to less clean areas
 - Min. number of total air changes indicated either supplied for positive pressure rooms or exhausted for negative pressure rooms
 - Recirculating room HVAC units
 - check if not included in project
 - each unit serves only single space
 - min. MERV 6 filter for airflow downstream of cooling coils
- 2.1-8.2.1.1 (5) Acoustic Considerations:
 - Equipment location or acoustic provisions limit noise associated with outdoor mechanical equipment to 65 dBA at building façade
- 2.1-8.2.1.2 (1) Ventilation & Space-Conditioning:
 - All rooms & areas used for patient care have provisions for ventilation
 - (2) Mechanical ventilation provided for all rooms & areas in facility in accordance with Table 7.1 of Part 4

2.1-8.3 **ELECTRICAL SYSTEMS**

2.1-8.3.2 **ELECTRICAL DISTRIBUTION & TRANSMISSION**

- 2.1-8.3.2.1 Switchboards Locations:
- (1)
 - (a) Located in areas separate from piping & plumbing equipment
 - (b) Not located in rooms they support
 - Accessible to authorized persons only
 - (c) Located in dry, ventilated space free of corrosive gases or flammable material

- 2.1-8.3.2.2 Panelboards:
 (1) Panelboards serving life safety branch emergency circuits only serve same floor, floor above & floor below
 (2) Panelboards serving critical branch emergency circuits only serve same floor
 (3) New panelboards not located in exit enclosures

2.1-8.3.3.1 **EMERGENCY ELECTRICAL SERVICE**

- (1) Emergency power per NFPA 99, NFPA 101 & NFPA 110

2.1-8.3.5 **ELECTRICAL EQUIPMENT**

- 2.1-8.3.5.2 Required handwashing station tied to building electrical service
 check if not included in project
 connected to essential electrical system

2.1-8.3.6 **ELECTRICAL RECEPTACLES**

- 2.1-8.3.6.2 Receptacles in Patient Care Areas:
 receptacles provided according to Table 2.1-1

2.1-8.3.7 **CALL SYSTEMS**

- Nurse call equipment legend includes patient stations, bath stations, staff emergency stations & code call stations

2.1-8.3.7.1

- (1) Nurse call system locations provided as required in Table 2.1-2
 (2) Nurse call systems report to attended location with electronically supervised visual & audible signals
 (4) Call systems meet requirements of UL 1069 *Standard for Hospital Signaling & Nurse Call Equipment*
 (5) Wireless system
 check if not included in project
 meet requirements of UL 1069

2.1-8.3.7.3 Bath Stations:

- (1) provided at each patient toilet
 alarm turned off only at bath station where it was initiated
 (3) located to side of toilets within 12" of front of toilet bowl & 3'-0" to 4'-0" above floor

- 2.1-8.3.7.4 Staff emergency stations for summoning local staff assistance for non-life-threatening situations at each patient care location

- 2.1-8.3.7.5 Code call station equipped with continuous audible or visual signal at point of origin

2.1-8.4.2 **PLUMBING & OTHER PIPING SYSTEMS**

- 2.1-8.4.2.5 Heated Potable Water Distribution Systems:
 (2) systems serving patient care areas are under constant recirculation
 non-recirculated fixture branch piping does not exceed 25'-0" in length
 (3) no dead-end piping
 (4) water-heating system has supply capacity at minimum temperatures & amounts indicated in Table 2.1-3

- (5) handwashing stations supplied as required above
or
 handwashing stations supplied at constant temperature between 70°F & 80°F using single-pipe supply

2.1-8.4.3 **PLUMBING FIXTURES**

- 2.1-8.4.3.1(1) Materials material used for plumbing fixtures non-absorptive & acid resistant

- 2.1-8.4.3.2 Handwashing Station Sinks:
 (1) basins reduce risk of splashing to areas where direct patient care is provided, sterile procedures are performed & medications are prepared
 (2) basin min. 144 square inches
 min. dimension 9 inches
 (3) made of porcelain, stainless steel, or solid-surface materials
 (5) water discharge point of faucets at least 10 inches above bottom of basin
 (7) anchoring for sinks withstands min. vertical or horizontal force of 250 lbs.
 (8) fittings operated without using hands for sinks used by medical & nursing staff, patients, public & food handlers

- (a) blade handles or single lever
 min. 4 inches long
 provide clearance required for operation

- or**
 (b) sensor-regulated water fixtures
 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
- 2.1-8.4.3.5 Clinical Sinks:
 - check if not included in project
 - (1) ___ trimmed with valves that can be operated without hands
 - (2) ___ handles min. 6 inches long
 - ___ 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 2.1-4
- 2.1-8.4.4.2 (2) ___ Vacuum discharge at least 25'-0" from all outside air intakes, doors & operable windows

- 2.1-8.6.2 **ELECTRONIC SURVEILLANCE SYSTEMS**
 - check if not included in project
- 2.1-8.6.2.1 ___ Devices in patient areas mounted in unobtrusive & tamper-resistant enclosures
- 2.1-8.6.2.2 ___ Monitoring devices not readily observable by general public or patients
- 2.1-8.6.2.3 ___ Receive power from emergency electrical system