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 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:

- 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.

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:

MDPH/DHCFLC 05/15 IP24
2.2-3.13

**HYPERBARIC SUITE**

<table>
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<th>Architectural Requirements</th>
<th>Building Systems Requirements</th>
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</thead>
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<td>Hyperbaric treatment area</td>
</tr>
<tr>
<td>2.2-3.13.1.1</td>
<td>meets requirements of “Hyperbaric Facilities” Chapter in NFPA 99</td>
</tr>
<tr>
<td>2.2-3.13.1.2</td>
<td>Class A hyperbaric chamber (multiplace)</td>
</tr>
<tr>
<td>(1)</td>
<td>check if not included in project</td>
</tr>
<tr>
<td>(a)</td>
<td>space to house Class A chambers &amp; supporting equipment accommodates equipment manufacturer specifications</td>
</tr>
<tr>
<td></td>
<td>manufacturer specifications have been submitted</td>
</tr>
<tr>
<td>(b)</td>
<td>min. clearance 3'-0&quot; around chamber</td>
</tr>
<tr>
<td></td>
<td>stretcher access area in front of chamber entry min. clearance 8'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>wheelchair access area in front of chamber entry min. clearance 5'-0&quot;</td>
</tr>
<tr>
<td>(c)</td>
<td>entries designed for wheelchairs or wheeled gurneys with access ramps flush with chamber entry doorway</td>
</tr>
<tr>
<td>(2)</td>
<td>Class B hyperbaric chamber (monoplace)</td>
</tr>
<tr>
<td>(a)</td>
<td>space to house Class B chambers &amp; supporting equipment accommodates equipment manufacturer specifications</td>
</tr>
<tr>
<td></td>
<td>manufacturer specifications have been submitted</td>
</tr>
<tr>
<td>(b)</td>
<td>min. clearance 2'-0&quot; around chamber</td>
</tr>
<tr>
<td></td>
<td>min. clearance 3'-0&quot; between control sides of two chambers</td>
</tr>
<tr>
<td></td>
<td>check if not included in project</td>
</tr>
<tr>
<td></td>
<td>(only if only one chamber proposed)</td>
</tr>
<tr>
<td></td>
<td>min. clearance 12 inches between foot end of each chamber &amp; any wall or obstruction</td>
</tr>
<tr>
<td>(c)</td>
<td>area in front of chamber entry designed for stretcher access min. clearance 8'-0&quot;</td>
</tr>
<tr>
<td></td>
<td>oxygen service valve for each chamber</td>
</tr>
<tr>
<td>2.2-3.13.4</td>
<td>Pre-procedure patient holding area</td>
</tr>
<tr>
<td>(1)</td>
<td>located under staff control</td>
</tr>
<tr>
<td></td>
<td>located out of traffic flow from chamber</td>
</tr>
<tr>
<td></td>
<td>does not obstruct access to exits from hyperbaric suite</td>
</tr>
<tr>
<td>(2)</td>
<td>stretcher patients in holding area out of direct line of normal traffic</td>
</tr>
<tr>
<td>2.2-3.13.4.2</td>
<td>patient holding area sized to accommodate inpatients on stretchers or beds</td>
</tr>
<tr>
<td>Medical Gases:</td>
<td>2 OX, 2 VAC</td>
</tr>
</tbody>
</table>

Table 2.1-4
**Architectural Requirements**

2.2-3.13.6  SUPPORT AREAS FOR HYPERBARIC SUITE  
(may be shared with adjacent wound care suite)

2.2-3.12.6.6  ___ Medication safety zone - medication preparation room

2.1-2.6.6.2(1)
(a)  ___ under visual control of nursing staff
(b)  ___ work counter
(c)  ___ handwashing station
(d)  ___ lockable refrigerator
(e)  ___ locked storage for controlled drugs
(f)  ___ Sharps Containers:  
   □ check if not included in project
   ___ sharps containers placed at height that allows users to see top of container
(g)  ___ space to prepare medicines in addition to any self-contained medicine-dispensing unit

2.2-3.12.6.7  ___ Nourishment area or room

(1)  ___ drinking water dispensing unit for patient use separate from handwashing station

2.1-2.6.7.2
(1)  ___ handwashing station
(2)  ___ work counter
(3)  ___ refrigerator
(4)  ___ microwave
(5)  ___ storage cabinets
(6)  ___ space for temporary storage of unused & soiled food service implements

2.1-2.6.7.3  ___ provisions & space for separate temporary storage of unused & soiled meal trays not picked up at mealtime

2.1-2.6.9  ___ Clean workroom or clean supply room

2.1-2.6.9.1  ___ clean workroom used for preparing patient care items

(a)  ___ work counter
(b)  ___ handwashing station
(c)  ___ storage facilities for clean & sterile supplies

or

2.1-2.6.9.2  ___ clean supply room used only for storage & holding as part of system for distribution of clean & sterile supplies

2.1-2.6.10  ___ Soiled workroom or soiled holding room

2.1-2.6.10.1  ___ soiled workroom

(a)  ___ handwashing station
(b)  ___ flushing-rim clinical service sink with bedpan washer
(c)  ___ work counter
(d)  ___ space for separate covered containers

or

**Building Systems Requirements**

Ventilation:
- 4 air changes per hour  Table 7.1
- 2 air changes per hour  Table 7.1
- 4 air changes per hour  Table 7.1
- 2 air changes per hour  Table 7.1
- 10 air changes per hour  Table 7.1

Nurse Call System:
- Duty station  Table 2.1-2
- Duty station  Table 7.1
- Duty station  Table 7.1
- Duty station  Table 7.1
- Duty station  Table 7.1
### Architectural Requirements

2.1-2.6.10.2

(1) __ soiled holding room

(a) __ handwashing station or hand sanitation station

(b) __ space for separate covered containers

2.2-3.12.6.11 __ Stretcher/wheelchair storage space

2.2-3.13.6.1 __ Reception/control desk

2.2-3.13.6.4 __ Consultation/treatment room

2.2-3.13.6.11

(1) __ Equipment & Supply Storage:

   (a) __ clean linen & supply storage

   (b) __ gas cylinder room

   (a) __ space to house eight (H) cylinders

   (b) __ two gas manifolds (min. two (H)

   cylinders on each manifold)

2.2-3.13.6.12 __ Environmental services room

   __ immediately accessible* to hyperbaric suite

2.1-2.6.12.2

(1) __ service sink or floor-mounted mop sink

(2) __ provisions for storage of supplies & housekeeping equipment

(3) __ handwashing station or hand sanitation station

2.2-3.13.6.13 __ Compressor room

(1) __ sized for chamber compressors, accumulator tanks & fire suppression system

   __ meets requirements of NFPA 99

   "Hyperbaric Facilities" chapter

(2) __ reserve breathing gases housed in compressor room

   __ located in close proximity to hyperbaric chamber room

   or

   __ reserve breathing gases housed in separate storage room

   __ located in close proximity to hyperbaric chamber room

2.2-3.13.7 **SUPPORT AREAS FOR STAFF**

(may be shared with adjacent wound care department)

(1) __ Staff toilet room with handwashing station

   __ immediately accessible* to hyperbaric suite for staff use

   __ Ventilation:

   __ Min. 10 air changes per hour

   __ Exhaust

Table 7.1

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**Building Systems Requirements**

Ventilation:

__ 10 air changes per hour

__ Exhaust

__ Negative pressure

Table 7.1
SUPPORT AREAS FOR PATIENTS

2.2-3.13.8.1 Patient waiting area
☐ check if not included in project
(only if two or fewer Class B hyperbaric chambers in suite)

(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 them

2.2-3.13.8.2 Patient changing rooms
(1) (a) seat or bench made of non-absorbable material
(b) mirror
(c) provisions for hanging patient clothing & for securing valuables
(2) at least one changing room accommodates wheelchair patients

2.2-3.13.8.3 Patient toilet room with handwashing station
☐ directly accessible* to hyperbaric suite

Ventilation:
☐ Min. 10 air changes per hour
☐ Exhaust

ARCHITECTURAL DETAILS

2.1-7.2.1.1 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 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
(b) Min. 83.5" clear door height for diagnostic/treatment areas

(3) (a) Swinging doors for personnel use in addition to sliding doors
☐ check if not included in project
☐ min. clear width 34.5"
(b) Doors do not swing into corridors (except doors to non-occupiable spaces & doors with emergency breakaway hardware)
(4) Lever hardware
(b) Doors for patient toilet facilities
(5) 2 doors separated by horizontal distance equal to one-half length of max. diagonal room dimension
(a) or door that swings outward
or door equipped with emergency rescue hardware
or sliding door
(b) 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) Handw. 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 porcelain, stainless steel or solid surface materials
(a) plastic laminate countertops check if not included in project substrate marine-grade plywood (or equivalent) with impervious seal
(b) Designed to prevent storage beneath sink
(6) provisions for drying hands
(a) hand-drying device does not require hand contact
(d) directly accessible* to sinks
(7) 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

2.1-7.2.12 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 workrooms, 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
(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
(4/6.3.1.2 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
(b) bottom min. 3'-0" above roof level
4/6.4 Filtration:
   (a) Filter banks conform to Table 6.4
   (b) Filter Bank #1 placed upstream of heating & cooling coils
   (c) Filter Bank No. 2 installed downstream of cooling coils & supply fan

4/6.7 Air Distribution Systems
   (a) Ducted return or exhaust systems in spaces listed in Table 7.1 with required pressure relationships
   (b) Ducted return or exhaust systems in inpatient care areas

4/6.9 Duct Lining:
   (a) No duct lining in ductwork located downstream of Filter Bank #2

4/7. Space Ventilation:
   (a) Spaces ventilated per Table 7.1
   (b) Air movement from clean areas to less clean areas
   (c) Min. number of total air changes indicated either supplied for positive pressure rooms or exhausted for negative pressure rooms
   (d) Recirculating room HVAC units

2.1-8.2.1.1 Acoustic Considerations:
   (5) Equipment location or acoustic provisions limit noise associated with outdoor mechanical equipment to 65 dBA at building façade

2.1-8.2.1.2 Ventilation & Space-Conditioning:
   (1) 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
   (a) Switchboards Locations:
      (1) Located in areas separate from piping & plumbing equipment

   (b) Not located in rooms they support
   (c) Accessible to authorized persons only
   (d) Located in dry, ventilated space free of corrosive gases or flammable material

2.1-8.3.3 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

EMERGENCY ELECTRICAL SERVICE
   (1) Emergency power per NFPA 99, NFPA 101 & NFPA 110

2.1-8.3.5 ELECTRICAL EQUIPMENT
   (a) Required handwashing station or scrub sink tied to building electrical service
   (b) check if not included in project
   (c) connected to essential electrical system

2.1-8.3.6 ELECTRICAL RECEPTACLES
   (a) Receptacles in Patient Care Areas:
      (1) receptacles provided according to Table 2.1-1

2.1-8.3.7 CALL SYSTEMS
   (a) Nurse call equipment legend includes patient stations, bath stations, staff emergency stations & code call stations

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

2.1-8.3.7.3 Bath Stations:
   (1) alarm turned off only at bath station where it was initiated
   (2) 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
- (3) non-recirculated fixture branch piping does not exceed 25'-0" in length
- (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

2.1-8.4.2.6  **Drainage Systems:**

- (1) drainage piping above ceiling of, or exposed in electric closets
- check if not included in project
- special provisions to protect space below from leakage & condensation

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
- (3) min. dimension 9 inches
- (4) 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

2.1-8.4.4  **MEDICAL GAS & VACUUM SYSTEMS**

2.1-8.4.4.2  **Vacuum discharge at least 25'-0" from all outside air intakes, doors & operable windows**

2.1-8.6.2  **ELECTRONIC SURVEILLANCE SYSTEMS**

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**