

COMPLIANCE CHECKLIST

IP22: Endoscopy Services

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**

2.2-3.11

ENDOSCOPY SERVICES

- 2.2-3.11.1.1 Provisions made for patient examination, interview, preparation & testing & for obtaining vital signs of patients
- 2.2-3.11.1.2
 (1) Facility Layout:
 (a) procedure room
 (b) instrument processing room
 (c) patient holding/preparation & recovery room or area
 (2) Circulation & Restricted Access:
 (a) suite designed to facilitate movement of patients & personnel into, through & out of defined areas in suite

2.2-3.11.2 **ENDOSCOPY PROCEDURE ROOMS**

- 2.2-3.11.2.2 Space Requirements:
 (1) room min. clear floor area 200 sf
 (2) permit min. clearance 3'-6" at each side, head & foot of stretcher/table

- Ventilation:
 Min. 6 air changes per hour Table 7.1
 No recirculating room units
 Power:
 8 electrical receptacles Table 2.1-1
 Nurse Call System:
 Emergency staff assistance station Table 2.1-2
 Medical Gases:
 1 OX, 3 VAC Table 2.1-4

- 2.1-7.2.3.1(6) Monolithic floor with integral covered 6" high wall base

- 2.2-3.11.2.4 Provisions made for patient privacy

- 2.2-3.11.2.5 Handwashing station

- 2.2-3.11.2.6 Patient toilet room
 located to be readily accessible* from procedure room
 separate from public use toilet

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

2.2-3.11.3 **PRE-PROCEDURE & RECOVERY PATIENT CARE AREAS**

- 2.2-3.11.3.2 Pre-procedure patient care area
 (1) located under observation of nursing staff
 (b) at least one pre-procedure patient care station per procedure room
 (c)

- 2.2-3.3.4.2(2) Space Requirements:
 patient bays*
 check if not included in project
 min. clear floor area 60 sf
 5'-0" between sides of patient beds/stretchers
 4'-0" between sides of patient beds/ stretchers & adjacent walls or partitions
 min. clearance 3'-0" between foot of bed & cubicle curtain

- Nurse Call System:
 Patient station Table 2.1-2
 Emergency staff assistance station

Architectural Requirements

Building Systems Requirements

- ___ 8'-0" wide clear aisle independent of foot clearance between patient stations or other fixed objects
- ___ patient cubicles*
 - check if not included in project
 - ___ min. clear floor area 80 sf
 - ___ min. clearance 3'-0" between sides & foot of lounge chairs/stretchers & adjacent walls or partitions
- ___ single-bed rooms
 - check if not included in project
 - ___ min. clear floor area 100 sf
 - ___ min. clearance 3'-0" between sides & foot of lounge chairs/stretchers & adjacent walls or partitions
- (4) ___ provisions made for patient privacy
- (5) Handwashing Stations:
 - 2.1-7.2.2.8(1) ___ handwashing stations in patient care areas located to be visible & unobstructed
 - 2.1-2.6.5.3 ___ handwashing stations that serve multiple patient care stations
 - check if not included in project:
 - (1) ___ at least one handwashing station for every 4 patient care stations or fewer & for each major fraction thereof
 - (2) ___ evenly distributed
 - ___ provide uniform distance from two patient care stations farthest from handwashing station
- 2.2-3.11.2.6 ___ Patient toilet room
 - ___ located to be directly accessible* from pre-procedure & recovery patient care areas
 - ___ separate from public use toilet
- 2.2-3.11.3.3 ___ Recovery area
 - (1) ___ located under observation of nursing staff
 - (2) ___ at least one patient care station per procedure room
- 2.2-3.3.4.3(2) Space Requirements:
 - (a) ___ min. clear floor area 80 sf for each bay or cubicle
 - (b) ___ min. clearance 5'-0" between patient stretchers or beds
 - ___ min. clearance 4'-0" between patient stretchers or beds & adjacent walls or other fixed elements (sides & foot)
 - ___ min. clearance 3'-0" from foot of stretcher or bed to closed cubicle curtain
- (4) ___ Provisions made for patient privacy

- Ventilation:
 - ___ 10 air changes per hour Table 7.1
 - ___ Exhaust
- Ventilation:
 - ___ Min. 6 air changes per hour Table 7.1
 - ___ No recirculating room units
- Power:
 - ___ 8 receptacles convenient to head of each bed Table 2.1-1
 - ___ Selected receptacles on emergency power NFPA 99
- Nurse Call System:
 - ___ Emergency staff assistance station Table 2.1-2
 - ___ Code call station
- Medical Gases:
 - ___ Portable oxygen & vacuum available Table 2.1-4

Architectural Requirements

Building Systems Requirements

- (5) Handwashing Stations:
- 2.1-7.2.2.8(1) handwashing stations in patient care areas located to be visible & unobstructed
- 2.1-2.6.5.3 handwashing stations that serve multiple patient care stations
 check if not included in project:
- (1) at least one handwashing station for every 4 patient care stations or fewer & for each major fraction thereof
- (2) evenly distributed
 provide uniform distance from two patient care stations farthest from handwashing station

2.2-3.11.4 **INSTRUMENT PROCESSING ROOM**

- 2.2-3.11.4.1 (4) Instrument processing room allows for flow of instruments from decontamination area to clean work area & then to storage in separate location
- (b) Min. clearance 3'-0" between decontamination area & clean work area
- (6) (a) Countertops & casework
 made of materials that are impervious to staining & cleaning chemicals
 backsplashes min. 12 inches high
- (b) backsplashes min. 12 inches high
- 2.2-3.11.4.2 Decontamination area
- (1) work counter
- (2) handwashing station
- (3) utility sink
- 2.2-3.11.4.3 Clean work area
- (1) (a) countertop with space for equipment
- (b) handwashing station
- (c) storage for supplies
- (3) endoscope storage in instrument processing room
 storage cabinet with doors
 cabinet located at least 3'-0" from any sink
- (a) cabinet located for access separate from decontamination area
- (b) cabinet located for access separate from decontamination area
- (c) **or**
 separate endoscope storage closet
- 2.1-7.2.3.1(6) Monolithic floor with integral coved 6" high wall

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

Architectural Requirements

Building Systems Requirements

- 2.2-3.11.6 **SUPPORT AREAS FOR ENDOSCOPY PROCEDURE SUITE**
- 2.2-3.11.6.1 ___ Nurse station
- 2.2-3.11.6.2 ___ Documentation area
 - ___ located in procedure room & pre-procedure & recovery patient care areas
- 2.2-3.11.6.6 ___ Medication safety zone
 - 2.1-2.6.6.1 (2) ___ medication preparation room
 - or
 - ___ self-contained medication dispensing unit
 - (a) ___ located out of circulation paths to minimize distraction & interruption
 - (c) ___ work counters
 - (d) ___ task lighting
 - (e) ___ meet acoustic design criteria per 1.2-5.1
 - 2.1-2.6.6.2 (1) ___ medication preparation room
 - check if not included in project
 - (a) ___ under visual control of nursing staff
 - (b) ___ work counter
 - ___ handwashing station
 - ___ lockable refrigerator
 - ___ locked storage for controlled drugs
 - (c) Sharps Containers:
 - check if not included in project
 - ___ sharps containers placed at height that allows users to see top of container
 - (d) ___ space to prepare medicines in addition to any self-contained medicine-dispensing unit
 - (2) ___ self-contained medication dispensing units
 - check if not included in project
 - (a) ___ located at nurse station, in clean workroom or in an alcove
 - ___ lockable unit to secure controlled drugs
 - (b) ___ handw. located next to stationary medication-dispensing units
 - 2.2-3.11.6.10 ___ Soiled workroom
 - check if not included in project
 - (1) ___ physically separated from all other areas of department
 - (2) ___
 - (a) ___ handwashing station
 - (b) ___ flushing-rim clinical service sink
 - (c) ___ work surface
 - (d) ___ holding areas for trash, linen & contaminated waste
 - 2.2-3.11.6.11 (2) ___ General equipment & supply storage room
 - ___ min. 25 sf per procedure room

- Ventilation:
 - ___ Min. 4 air changes per hour Table 7.1
- Nurse Call System:
 - ___ Duty station Table 2.1-2

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

Architectural Requirements

Building Systems Requirements

- (3) Stretcher & wheelchair storage
- (5) Anesthesia equipment & supply storage
- (4) Emergency equipment storage
- 2.1-2.6.11.4
 - (1) at least one emergency equipment storage location
 - (2) under visual observation of staff
 - (3) storage locations in corridors do not infringe on min. required corridor width
- 2.2-3.11.6.12 Environmental services room
 - exclusively for endoscopy procedure 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
- 2.2-3.11.6.13 Fluid waste disposal facilities
 - immediately accessible* to procedure rooms (clinical sink)
 - immediately accessible* to recovery stations (toilet equipped with bedpan washer)

Ventilation:
 10 air changes per hour Table 7.1
 Exhaust

SUPPORT AREAS FOR STAFF

- 2.2-3.11.7.1 Staff changing areas (may be shared with surgery department)
 - (1)(2) locker area with one or more private changing rooms
 - (3)
 - (a) lockers
 - (b) toilets
 - (c) handwashing stations
 - (d) space for changing clothes
 - (e) provision for separate storage of clean & soiled surgical attire
- 2.2-3.11.7.2 Lounge & toilet facilities (may be shared with other departments)

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

SUPPORT AREAS FOR PATIENTS

- 2.2-3.11.8.1 Patient changing areas
 - (1)(2) check if not included in project (only if pre-procedure area has all private room or cubicles*)
 - provisions for storing patient belongings
 - toilet
 - changing or gowning area

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
 - (2) Min. height 7'-0" in radiography, procedure & operating rooms from floor to lowest protruding element of equipment or fixture in stowed position
 - (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**
 - 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
 - (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) 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

- 2.1-7.2.2.12 **NOISE CONTROL:**
 (1) ___ Recreation rooms, exercise rooms, equipment rooms & similar spaces with potential impact noises are not located directly over operating suites
 (2) ___ Partitions, floors & ceiling construction in patient areas conform to Table 1.2-6

2.1-7.2.3 SURFACES
v

- 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)
 (a) ___ 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:
 ___ cleanable with routine housekeeping equipment
 ___ acoustic & lay-in ceilings
 (b) ___ check if not included in project
 ___ do not create ledges or crevices
 (2) Ceiling finishes in endoscopy procedure rooms & endoscopy instrument processing:
 ___ capable of withstanding cleaning with chemicals
 (a) ___ lay-in ceiling
 ___ check if not included in project
 ___ gasketed or clipped down
 ___ cleanable

- (b) ___ no perforated, tegular, serrated, cut, or textured tiles

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
 4/6.4 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 recovery rooms
 ___ 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
 4/6.9 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
- 2.1-8.2.3.1 **Exhaust Systems:**
- (1) ___ Room routinely used for administering inhalation anesthesia & inhalation analgesia
 check if not included in project
- (a) ___ anesthesia scavenging system with air supply at or near ceiling & exhaust air inlets near floor level
- or**
- (b) ___ gas-collecting system arranged so as not to disturb patients respiratory systems
- (c) ___ gases from scavenging system exhausted directly to outside
- 2.1-8.3 **ELECTRICAL SYSTEMS**
- 2.1-8.3.2 **ELECTRICAL DISTRIBUTION & TRANSMISSION**
- 2.1-8.3.2.1(1) **Switchboards Locations:**
- (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 or scrub sink 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:
 ___ 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

- 2.1-8.4.2.6 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
 ___ 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

- 2.1-8.4.3.5 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