## **COMPLIANCE CHECKLIST**

## IP12\_Emergency 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 2018 Edition of the FGI Guidelines for Design and Construction of Hospitals. Applicants must verify compliance of the plans submitted to the Department with all referenced requirements from the Licensure Regulations and FGI Guidelines when completing this Checklist. A separate Checklist must be completed for each nursing unit, hospital or clinic department, or clinical suite.

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

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

#### Instructions:

- 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.
- 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.
- EX = Check box under section titles or individual requirements lines for optional services or functions that are not included in the project area.
- W = Waiver requested for specific section of the Regulations or FGI Guidelines, where hardship in meeting requirement can be demonstrated (a Physical Plant Waiver Form must be completed for each waiver request). An explicit floor plan or plan detail must be attached to each waiver request.
- 4. All room functions marked with "X" must be shown on the plans with the same name labels as in this checklist.
- 5. Mechanical, electrical & plumbing requirements are only partially mentioned in this checklist. The relevant section of the FGI Guidelines must be used for project compliance with all MEP requirements and for waiver references.
- 6. Oxygen, vacuum, medical air, waste anesthesia gas disposal and instrument air outlets (if required) are identified respectively by the abbreviations "OX", "VAC", "MA", "WAGD" & "IA".
- 7. Requirements referenced with "FI" result from formal interpretations from the FGI Interpretations Task Group.
- 8. The location requirements including asterisks (\*) refer to the definitions of the Glossary in the beginning section of the FGI Guidelines and reproduced in this checklist.

Facility Name:	DoN Project Number: (if applicable)
Facility Address:	
Satellite Name: (if applicable)	Building/Floor Location:
Satellite Address: (if applicable)	
	Submission Dates:
Project Description:	Initial Date:
	Revision Date:

# **Architectural Requirements**

# **Building Systems Requirements**

2.2-3.1	EMERGENCY SERVICES
2.2-3.1.3.2 2.1-6.2.1	ENTRANCE  Vehicular drop-off & pedestrian entrance  at least one entrance is reachable
(1)	from grade level Public roads signs direct ambulance traffic to ambulance entrance to ED Vehicle traffic to public entrance
(2)	Paved emergency access to permit discharge of patients from automobiles & ambulances be provided
(3)	ED entrance is clearly marked
(4)	<ul> <li>Raised platform/dock used for ambulance discharge</li> <li>check if <u>not</u> included in project</li> <li>ramp or elevator/lift to grade level provided for pedestrian &amp; wheelchair access</li> </ul>
(5)	<ul> <li>Emergency vehicle entry cover/canopy</li> <li>provides shelter for both patient &amp;</li> <li>emergency medical crew during</li> <li>transfer between emergency vehicle &amp;</li> <li>building</li> </ul>
(6)	Emergency bays sized to be compatible with horizontal & vertical vehicle clearances of EMS providers
(7)	ED ambulance entrances provide min. 6'-0" in clear width to accommodate stretchers/ gurneys & expanded-capacity stretchers/ gurneys, mobile patient lift devices & accompanying attendants
(8)	lifts for patients of size are provided  □ check if <u>not</u> included in project (only if not required by Patient Handling & Movement Assessment – see Section 1.2-4.3)
2.2-3.1.3.8	<ul><li>Diagnostic service areas</li><li>access to imaging &amp; laboratory services</li><li>is provided</li></ul>
2.2-3.1.3.3	RECEPTION & TRIAGE AREAS  Emergency department designed to ensure that access control can be maintained at all times
(1)	Reception or triage areas located to provide means for observation of main entrance to department & public waiting area

	Architectural Requirements	<b>Building Systems Requirements</b>	
(2)	Public access points to treatment area are under direct observation of reception & triage areas		
(3)	Triage area		
(b)	provisions for patient privacy handwashing station provided in each triage room	Ventilation: Min. 12 air changes per hour Exhaust Negative pressure	Table 7.1
(d)	<ul> <li>one handwashing station provided for every 4 triage bays or cubicles</li> <li>hand sanitation station provided for each triage bay or cubicle</li> </ul>	Power:  Min. 6 receptacles in total convenient to head of gurney or bed At least 50% of receptacles connected to emergency power	Table 2.1-1
(e)	access to panic button for security emergencies	Nurse Call System: Patient station Staff assistance station Medical Gases:	Table 2.1-2
000101	BUBLIO WAITING ABEA	1 OX, 1 VAC per station	Table 2.1-3
2.2-3.1.3.4	PUBLIC WAITING AREA	Vantilation	
(1)	Public waiting area	Ventilation: Min. 12 air changes per hour Exhaust Negative pressure	Table 7.1
(a)	toilet facilities	Ventilation: Min. 10 air changes per hour Exhaust Negative pressure No recirculating room units	Table 7.1
(c)	<pre>provisions for drinking water provisions for telephone access</pre>		
2.2-3.1.3.5 (1) (2)	COMMUNICATIONS WITH EMS  Communication connections to emergency medical services (EMS) be provided  EMS base station is provided  check if not included in project  designed to reduce noise distractions & interruptions during radio transmissions		
2.2-3.1.3.6 (1)(b)	GENERAL TREATMENT ROOMS OR AREAS Examination/treatment rooms for pelvic exams allow for foot of examination table to face away from door		
(2) 2.1-3.2.2.1 (1)	Single-patient treatment rooms Space Requirements: New Construction: min. clear floor area 120 sf min. clear dimension 10'-0"	Ventilation: Min. 6 air changes per hour Lighting: Portable or fixed exam light	Table 7.1 2.1-8.3.4.3(3)
	or  Renovation: min. clear dimension 10-0	Power: Min. 8 receptacles in total	Table 2.1-1

	Architectural Requirements	Building Systems Requirements	
(2)(a)	room size permits room arrangement with min. clearance 3'-0" at each side & at foot of exam table	Min. 4 receptacles convenient to head of gurney or bed	
2.1-3.2.2.2		Nurse Call System: Staff assistance station Emergency call station	Table 2.1-2
(2)	storage for supplies		
(3)	accommodations for written or electronic documentation	Medical Gases: 1 OX, 1 VAC, 1 MA per gumey	Table 2.1-3
(4)	space for visitor's chair		
(5)	handwashing station		
2.2-3.1.3.6(2)(b)	space for medical equipment		
	view panel designed for patient visual privacy adjacent* to and/or in door		
2.2-3.1.3.6(3)	Multiple-patient treatment rooms		
( )	☐ check if <u>not</u> included in project		
2.1-3.2.3.1	Space Requirements:	Ventilation:	
(1)	separate patient bays or cubicles	Min. 6 air changes per hour	Table 7.1
` ,	with min. clear floor area 80 sf per patient care station		
(2)(a)	min. 5'-0" between sides of	Lighting:	
	adjacent* patient beds	Portable or fixed exam light	2.1-8.3.4.3(3)
(2)(b)	min. 4'-0" between sides of	Power:	
	patient beds & adjacent* walls or partitions	Min. 8 receptacles in total	Table 2.1-1
2.1-3.2.3.2(2)	accommodations for written or electronic documentation	Min. 4 receptacles convenient to head of gurney or bed	
2.1-3.2.3.2(3)	space for visitor's chair	Nurse Call System: Staff assistance station Emergency call station	Table 2.1-2
2.1-3.2.3.3	handwashing station	Emergency can cration	
(1)	at least one handwashing station	Medical Gases:	
( )	in each multiple-patient	1 OX, 1 VAC, 1 MA per	Table 2.1-3
	examination room	gurney	
2.1-2.8.7.3(1)	at least 1 handwashing station for every 4 patient care stations or fewer & for each major fraction		
	thereof		
2.1-2.8.7.3(2)	handwashing stations evenly distributed		
2.1-3.2.3.4	supply storage		
2.2-3.1.3.7	Patient toilet room	Ventilation:	
2.2-0.1.0.1	at least one for each 6 treatment rooms/ spaces & for each fraction thereof handwashing station	Min. 10 air changes per hour Exhaust Negative pressure No recirculating room units	Table 7.1

## **Architectural Requirements**

#### **Building Systems Requirements** 2.2-3.1.3.6(4) **GENERAL TRAUMA/RESUSCITATION ROOMS** Ventilation: Designed for emergency procedures (a) Single-patient T/R room Min. 15 air changes per hour Table 7.1 Positive pressure Space Requirements: No recirculating room units min. clear floor area 250 sf Lighting: Portable or fixed exam light 2.1-8.3.4.3(3) min. clearance 5'-0" provided Power: around all sides of gurney Min. 16 receptacles in total Table 2.1-1 convenient to head of or gurney or bed Multiple-patient T/R room Nurse Call System: (b) Staff assistance station Space Requirements: Table 2.1-2 min. clear floor area 200 sf for Emergency call station each patient bay defined by Medical Gases: privacy curtains 1 OX, 3 VAC, 1 MA per gurney Table 2.1-3 min. clearance 5'-0" on all sides of gurney min. clearance 10'-0" between each patient bed or gurney space for storage of supplies (c) PACS film illuminators or other systems to allow viewing of images & films in room Errata handwashing station space for code cart examination lights accommodations for written or electronic documentation physiological monitoring equipment storage for personal protective equipment 2.2-3.1.3.6(4)(e) doorways leading from ambulance entrance to trauma/resuscitation room have min. clear width 72 inches & min. height 83.5 inches PEDIATRIC TREATMENT ROOMS OR AREAS 2.2-3.1.3.6(5)(a) ☐ check if not included in project Location: pediatric treatment rooms located adjacent\* to family waiting area & toilet room 2.2-3.1.3.6(2) Single-patient treatment rooms Space Requirements: 2.1-3.2.2.1 Ventilation: New Construction: Min. 6 air changes per hour (1) Table 7.1 Lighting: min. clear floor area 120 sf Portable or fixed exam light 2.1-8.3.4.3(3) min. clear dimension 10'-0"

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min. clear floor area 100 sf

or

Renovation:

Power:

Min. 8 receptacles in total

Table 2.1-1

	Architectural Requirements	Building Systems Requirements	
(2)(a)	room size permits room arrangement with min. clearance 3'-0" at each side & at foot of exam table	Min. 4 receptacles convenient to head of gurney or bed	
2.1-3.2.2.2		Nurse Call System: Staff assistance station Emergency call station	Table 2.1-2
(2)	storage for supplies		
(3)	accommodations for written or electronic documentation	Medical Gases: 1 OX, 1 VAC, 1 MA per gurney	Table 2.1-3
(4)	space for visitor's chair		
(5)	handwashing station		
2.2-3.1.3.6(2)(b)	<ul><li>space for medical equipment</li><li>view panel designed for patient visual</li><li>privacy adjacent* to and/or in door</li></ul>		
2.2-3.1.3.6(3)	Multiple-patient treatment rooms		
040004	☐ check if <u>not</u> included in project	Montiletien	
2.1-3.2.3.1	Space Requirements:	Ventilation:	Table 7.1
(1)	<ul> <li>separate patient bays or cubicles</li> <li>with min. clear floor area 80 sf</li> <li>per patient care station</li> </ul>	Min. 6 air changes per hour	Table 7.1
(2)(a)	min. 5'-0" between sides of	Lighting:	
	adjacent* patient beds	Portable or fixed exam light Power:	2.1-8.3.4.3(3)
(2)(b)	min. 4'-0" between sides of patient beds & adjacent* walls or partitions	Min. 8 receptacles in total	Table 2.1-1
2.1-3.2.3.2(2)	accommodations for written or electronic documentation	Min. 4 receptacles convenient to head of gurney or bed	
2.1-3.2.3.2(3)	space for visitor's chair	Nurse Call System: Staff assistance station Emergency call station	Table 2.1-2
2.1-3.2.3.3	handwashing station	Emergency can station	
(1)	at least one handwashing station	Medical Gases:	
	in each multiple-patient examination room	1 OX, 1 VAC, 1 MA per gumey	Table 2.1-3
2.1-2.8.7.3(1)	at least 1 handwashing station for every 4 patient care stations or fewer & for each major fraction thereof		
2.1-2.8.7.3(2)	handwashing stations evenly distributed		
2.1-3.2.3.4	supply storage		
2.2-3.1.3.7	Patient toilet room at least one for each 6 treatment rooms/ spaces & for each fraction thereof handwashing station	Ventilation: Min. 10 air changes per hour Exhaust Negative pressure No recirculating room units	Table 7.1

### **Architectural Requirements Building Systems Requirements** 2.2-3.1.3.6(5)(b) Pediatric trauma/resuscitation rooms 2.2-3.1.3.6(4) Ventilation: designed for emergency procedures Min. 15 air changes per hour Table 7.1 Positive pressure No recirculating room units (a) single-patient T/R room Space Requirements: Lighting: min. clear floor area 250 sf Portable or fixed exam light 2.1-8.3.4.3(3) Power: \_\_\_ Min. 16 receptacles in total min. clearance 5'-0" Table 2.1-1 provided around all sides of convenient to head of gurney or bed gurney or multiple-patient T/R room Nurse Call System: (b) \_\_\_\_ Staff assistance station Space Requirements: Table 2.1-2 min. clear floor area 200 sf Emergency call station for each patient bay defined Medical Gases: by privacy curtains 1 OX, 3 VAC, 1 MA per gurney Table 2.1-3 min. clearance 5'-0" on all sides of gurney min. clearance 10'-0" between each patient bed or gurney space for storage of supplies (c) PACS film illuminators or other systems to allow viewing of images & films in room handwashing station Errata space for code cart examination lights accommodations for written or electronic documentation physiological monitoring equipment storage for personal protective equipment 2.2-3.1.3.6(4)(e) doorways leading from ambulance entrance to trauma/resuscitation room have min. clear width 72 inches & min. height 83.5 inches 2.2-3.1.3.6(5)(c) Playroom or play area provided in waiting area 2.2-3.1.3.6(6) TREATMENT ROOM FOR PATIENTS OF SIZE 2.1-2.3.1 Need to provide spaces designed for safe care of patients of size described in Project Narrative 2.1-2.3.1.1 (2)Patient Handling & Movement Assessment (PHAMA) including need for expanded capacity lifts & architectural details supporting movement of patients of size is attached to Project Narrative

### **Architectural Requirements Building Systems Requirements** 2.1-2.3.1.3 Patient Lift System: (1) accommodations for patient handling provided by either overhead lift system or floor-based full-body sling lift & standing-assist lifts (2)lifts capable of accommodating projected weight of patients of size 2.1-2.3.7 Single-patient examination or treatment room (may be subdivided with cubicle curtains when not in use for patient of size) 2.1-2.3.7.2 Space Requirements: Ventilation: Min. 6 air changes per hour Table 7.1 (1)(a)min. 5'-0" clearance at foot of expanded-capacity exam table (1)(b)Lighting: min. 5'-0" clearance on non-transfer \_\_\_\_ Portable or fixed exam light 2.1-8.3.4.3(3) side of expanded-capacity exam table Power: \_\_\_ Min. 8 receptacles in total Table 2.1-1 Clearance on Transfer Side of Expanded \_\_\_\_ Min. 4 receptacles convenient Capacity Exam Table: to head of gurney or bed (1)(c)Nurse Call System: ceiling- or wall-mounted lift is provided: min. 5'-0" clearance \_\_\_ Staff assistance station or Table 2.1-2 Emergency call station no ceiling- or wall-mounted lift is Medical Gases: provided: min. 7'-0" clearance 2.1-3.2.2.2 1 OX, 1 VAC, 1 MA per gurney Table 2.1-3 (2)storage for supplies (3)accommodations for written or electronic documentation (4) space for visitor's chair (5)handwashing station 2.2-3.1.3.6(2)(b) space for medical equipment \_\_\_\_ view panel designed for patient visual privacy adjacent\* to and/or in door 2.1-2.3.8 **Equipment & Supply Storage** accommodates size of expanded-capacity equipment (e.g. floor-based lifts lift, slings & accessories etc.) 2.1-2.3.10 Special Design Elements for Spaces for Care of Patients of Size: 2.1-2.3.10.1 all plumbing fixtures, handrails, grab bars, patient lift equipment, built-in furniture & other furnishings &

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equipment designed to accommodate maximum planned patient weight

	Architectural Requirements	<b>Building Systems Requirements</b>
2.1-2.3.10.2 (1) (2) (3)	Door Openings: (See Also Page 15)  min. clear width 45.5" for path of travel of expanded-capacity wheelchairs to public areas & patient care areas min. clear width 57" to patient rooms	
(3)	min. clear width 45.5" to toilet rooms	
2.2-3.1.3.6(6)(b)	<ul> <li>Ceiling-lift or wall-mounted lifts</li> <li>check if <u>not</u> included in project</li> <li>min. clearance 5'-6" from edge of expanded-capacity patient table or bed provided on transfer side</li> </ul>	
2.2-3.1.3.7	Patient toilet room at least one for each 6 treatment rooms & for each fraction thereof handwashing station	Ventilation: Min. 10 air changes per hour Table 7.1 Exhaust Negative pressure No recirculating room units
2.2-3.1.3.6(7)	GERIATRIC TREATMENT ROOM OR AREA  ☐ check if not included in project	<u> </u>
(a)	Designed to accommodate needs of geriatric patients	
(b)	Design of ED geriatric treatment rooms or areas is assessed for patient fall risks as part of safety risk assessment	
2.2-3.1.3.6(8) (a)	HUMAN DECONTAMINATION ROOM  Location: New Construction: decon. room provided with outside entry door located as far as practical but no less than 10'-0" from closest other entrance or Renovations: decontamination room provided with outside entry door located as far as practical  Internal door of decontamination room provides direct access into ED corridor or treatment room	
	Door swings into room Door lockable against ingress from corridor	
(b)	Space Requirements: min. clear floor area 80 sf	Ventilation: Min. 12 air changes per hour Table 7.1 Exhaust Negative pressure
(c)	Special Architectural Details: all smooth nonporous scrubbable non-absorptive non-perforated surfaces	No recirculating room units

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#### **Architectural Requirements Building Systems Requirements** (d) Special Plumbing System Requirements: room equipped with two hand-held shower heads with temperature controls floor drain to dedicated holding tank acid resistant fixtures \_\_ portable or hard-piped oxygen portable suction **FAST-TRACK AREA** 2.2-3.1.3.6(9) ☐ check if <u>not</u> included in project (2) Single-patient treatment rooms Space Requirements: Ventilation: 2.2-3.1.3.6(9)(a) Min. 6 air changes per hour Table 7.1 min. clear floor area 100 sf 2.1-3.2.2.1(2)(a) Lighting: room size permits room Portable or fixed exam light 2.1-8.3.4.3(3) arrangement with min. clearance Power: 3'-0" at each side & at foot of \_\_\_ Min. 8 receptacles in total Table 2.1-1 exam table Min. 4 receptacles convenient \_\_\_ storage for supplies 2.1-3.2.2.2(2) to head of gurney or bed Nurse Call System: 2.1-3.2.2.2(3) accommodations for written or \_\_\_ Staff assistance station Table 2.1-2 electronic documentation Emergency call station 2.1-3.2.2.2(4) space for visitor's chair Medical Gases: 2.1-3.2.2.2(5) handwashing station \_\_\_ 1 OX, 1 VAC Table 2.1-3 2.2-3.1.3.6(2)(b) space for medical equipment view panel designed for patient visual privacy adjacent\* to and/or in door 2.2-3.1.3.6(3) Multiple-patient treatment rooms ☐ check if not included in project 2.1-3.2.3.1 Space Requirements: Ventilation: Table 7.1 Min. 6 air changes per hour (1) separate patient bays or cubicles Liahtina: with min. clear floor area 80 sf Portable or fixed exam light 2.1-8.3.4.3(3) per patient care station (2)(a)Power: min. 5'-0" between sides of \_\_\_ Min. 8 receptacles in total Table 2.1-1 adjacent\* patient beds (2)(b)\_\_\_ Min. 4 receptacles min. 4'-0" between sides of convenient to head of gurney patient beds & adjacent\* walls or or bed partitions Nurse Call System: 2.1-3.2.3.2(2) accommodations for written or Staff assistance station Table 2.1-2 electronic documentation Emergency call station 2.1-3.2.3.2(3) Medical Gases: space for visitor's chair 2.1-3.2.3.3 1 OX, 1 VAC per patient Table 2.1-3 handwashing station (1) at least one handwashing station in each multiple-patient examination room 2.1-2.8.7.3(1) at least 1 handw. station for every 4 patient care stations or fewer & for each major fraction thereof 2.1-2.8.7.3(2) handwashing stations evenly distributed 2.1-3.2.3.4 supply storage

#### **Architectural Requirements Building Systems Requirements** 2.2-3.1.3.6(9)(b) Waiting area ☐ check if not included in project located for immediate access to patient toilet room min. two chairs per treatment room 2.2-3.1.3.7 Patient toilet room Ventilation: \_\_\_ at least one for each 6 treatment rooms/ Min. 10 air changes per hour Table 7.1 \_\_\_ Exhaust spaces & for each fraction thereof \_\_\_\_ Negative pressure handwashing station No recirculating room units 2.2-3.1.4 SPECIAL PATIENT CARE AREAS 2.2-3.1.4.2 Airborne infection isolation (AII) room Location: (3)AII room visible from nurse station 2.1-2.4.2.4 Architectural Details & Furnishings: (1)(a)perimeter walls ceiling & floor including penetrations constructed to prevent air exfiltration (1)(b)self-closing devices on all room exit doors or activation of audible alarm when AII room is in use as isolation room edge seals provided along sides & top of doorframe for any door into AII room 2.2-3.1.3.6(2) 2.1-3.2.2.1 Space Requirements: Ventilation: Min. 12 air changes per hour (1) **New Construction:** Table 7.1 Exhaust min. clear floor area 120 sf \_\_\_ Negative pressure \_ min. clear dimension 10'-0" No recirculating room units or Exhaust register located Part 3/7.2.1 Renovation: directly above patient bed on min. clear floor area 100 sf ceiling or on wall near head of bed (2)(a)Lighting: room size permits room Portable or fixed exam light 2.1-8.3.4.3(3) arrangement with min. clearance Power: 3'-0" at each side & at foot of Min. 8 receptacles in total Table 2.1-1 exam table 2.1-3.2.2.2(2) storage for supplies \_\_\_ Min. 4 receptacles convenient 2.1-3.2.2.2(3) accommodations for written or to head of gurney or bed electronic documentation 2.1-3.2.2.2(4) Nurse Call System: space for visitor's chair \_\_\_ Staff assistance station Table 2.1-2 (5) handwashing station Emergency call station 2.2-3.1.3.6(2)(b) Medical Gases: space for medical equipment \_\_\_ 1 OX, 1 VAC, 1 MA per patient \_\_ view panel designed for patient visual Table 2.1-3 privacy adjacent\* to and/or in door

	Architectural Requirements	<b>Building Systems Requirements</b>
2.2-3.1.4.3	SECURE HOLDING ROOMS  ☐ check if not included in project	
(1)	Locations facilitate staff observation & monitoring of patients in these areas	
(2)	Min. clear floor area 60 sf Minimum wall length 7'-0"	Ventilation: Min. 6 air changes per hour Table 7.1
(0)	Maximum wall length 11'-0"	
(3) (a)	<ul><li>Designed to prevent injury to patients</li><li>All finishes impact- tamper- &amp; ligature-resistant</li></ul>	
	Light fixtures impact- tamper- & ligature-resistant	
	Ventilation diffusers & registers impact- tamper- & ligature-resistant	
	Sprinklers impact- tamper- & ligature- resistant	
(b)	No electrical outlets	
(c)	No medical gas outlets	
	No sharp corners edges or protrusions & walls be free of objects or accessories	
(d)	Patient room doors swing out & have hardware on exterior side only	
(e)	Small impact-resistant view panel or window provided in door for discreet staff observation of patient	
2.2-3.1.8	SUPPORT AREAS FOR EMERGENCY DEPARTMENT	
2.2-3.1.8.2	Administrative center or nurse station	
(2)	nurse master station & central monitoring equipment be provided	
(3)	Decentralized nurse stations near clusters of treatment rooms	
(4)	<ul> <li>check if <u>not</u> included in project</li> <li>visual observation of all traffic into unit</li> <li>of all patients from nurse station</li> </ul>	
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*	
2.1-2.8.2.2	Center for reception & communication	
	self-contained <b>or</b>	
	combined with administrative center or nurse station	
2.2-3.1.8.11 2.1-2.8.11.3	Clean supply room	Ventilation:
2.1-2.0.11.3	<ul> <li>used only for storage &amp; holding as part of system for distribution of clean &amp; sterile supplies</li> </ul>	Min. 4 air changes per hour Table 7.1 Positive pressure

A	Architectural Requirements	Building Systems Requirements	
2.2-3.1.8.12 2.1-2.8.12.2 (1)(a) (1)(b)	Soiled workroom or soiled holding room soiled workroom handwashing station flushing-rim clinical service sink     with bedpan-rinsing device or     equivalent flushing-rim fixture work counter	Ventilation: Min. 10 air changes per hour Exhaust Negative pressure No recirculating room units  Nurse Call System:	Table 7.1
(1)(d) (2) (a) (b)	space for separate covered containers for waste & soiled linen fluid management system is used check if not included in project electrical & plumbing connections that meet manufacturer requirements space for docking station or	Duty station (light/sound signal)	Table 2.1-2
2.1-2.8.12.3 (1) (2)	<ul> <li>soiled holding room</li> <li>handwashing station or hand</li> <li>sanitation station</li> <li>space for separate covered</li> <li>containers for waste &amp; soiled linen</li> </ul>	Ventilation: Min. 10 air changes per hour Exhaust Negative pressure No recirculating room units	Table 7.1
2.2-3.1.8.13 E (1) - (2) - (3) (3) 2.2-3.1.8.14	Equipment & supply storage  Wheelchair & gurney storage area wheelchairs & gurneys for arriving patients  Emergency equipment storage  provided under visual observation by staff  storage locations in corridors do not encroach on minimum required corridor width Environmental services room		
2.1-2.8.14.2(1) 2.1-2.8.14.2(2)	service sink or floor-mounted mop sink provisions for storage of supplies & housekeeping equipment	Ventilation: Min. 10 air changes per hour Exhaust Negative pressure No recirculating room units	Table 7.1
2.1-2.8.14.2(3)	handwashing station or hand sanitation station		
2.2-3.1.8.16	Security station  □ check if not included in project  located near emergency entrances & triage/reception area  means of observing public waiting areas  means of observing ED pedestrian ambulance entrance  means of observing ED ambulance entrance  means of controlling access		
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	Architectural Requirements	Buildir	ng Systems Requirements
2.2-3.1.8.17 (1)	<ul> <li>Human waste disposal facilities</li> <li>provisions for disposal of solid 8</li> <li>waste provided in ED (e.g. clinic w/ bedpan-rinsing device in soile workroom)</li> </ul>	al sink	
2.2-3.1.9	SUPPORT AREAS FOR EMERGENCY DEPARTMENT STAFF Location: staff support areas immediately accessible* to Emergency Dep		
2.1-2.9.1	Staff lounge min.100 sf		
2.1-2.9.2	Staff toilet room (permitted to be uni	covl	
2.1-2.9.2.1	stail tollet room (permitted to be uniform to be uniform)	ent Ventila	
	care unit		in. 10 air changes per hour Table 7.1
2.1-2.9.2.2	toilet & handwashing station	N	xhaust egative pressure o recirculating room units
2.1-2.9.3	Staff storage facilities		
2.1-2.9.3.1	<ul><li>securable closets or cabinet</li><li>compartments for personal staff</li><li>located in or near nurse station</li></ul>		
<u>Immediately</u>	ocated next to but not necessarily connected to accessible: Available either in or adjacent to the essible: Available on the same floor or in the same floor	e identified area	or room
Architectura	I Details & MEP Requirements		
2.1-7.2.2 2.1-7.2.2.1 NFPA 101, 18.2.3.4	ARCHITECTURAL DETAILS  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	2.1-7.2.2.2 (1) (3)	CEILING HEIGHT:  Min ceiling height 7'-6"in corridors & in normally unoccupied spaces  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
	Aisles, corridors & ramps in adjunct areas not intended for the housing, treatment, or use of inpatients not less than 44" in clear & unobstructed width  or Detailed code review incorporated in Project Narrative	2.1-7.2.2.3 (1) (a)	DOORS & DOOR HARDWARE: Door Type: doors between corridors, rooms, or spaces subject to occupancy swing type or sliding doors

(b)	sliding doors	2.1-7.2.2.8	HANDWASHING STATIONS:
(b)	□ check if <u>not</u> included in project     □ manual or automatic     sliding doors comply with	(1)(c) (3)	—— Handwashing stations in patient care areas located so they are visible & unobstructed
	NFPA 101 detailed code review included in Project Narrative no floor tracks	(a)	Handwashing station countertops made of porcelain, stainless steel, solid-surface materials or impervious
(2) (a)	Door Opening: min. 45.5" clear door width for diagnostic/treatment areas min. 83.5" clear door height for	(b)	plastic laminate assembly  Countertops substrate  check if <u>not</u> included in project  marine-grade plywood (or equivalent material) with
(b)	diagnostic/treatment areas  swinging doors for personnel use in addition to sliding doors  check if not included in project min. clear width 34.5"	(4)	impervious seal Handwashing station casework check if <u>not</u> included in project designed to prevent storage
(3) (a)	Door Swing: doors do not swing into corridors except doors to non-occupiable	(5)	beneath sink Provisions for drying hands check if <u>not</u> included in project (only at hand scrub facilities)
	spaces & doors with emergency breakaway hardware	(a) (b)	<ul><li>hand-drying device does not require hands to contact dispenser</li><li>hand-drying device is enclosed to</li></ul>
	Lever hardware or push/pull latch hardware	(6)	protect against dust or soil & to ensure single-unit dispensing Liquid or foam soap dispensers
(5) (a)	Doors for Patient Toilet Facilities: two separate doors or door that swings outward	2.1-7.2.2.9 (1) (3)	GRAB BARS:  Grab bars anchored to sustain concentrated load 250 pounds Ends of grab bars constructed to prevent snagging clothes of patients
	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	2.1-7.2.2.10 (1) (3) (4) (5) (6)	staff & visitors  HANDRAILS:  Handrails installed on both sides of patient use corridors  Rail ends return to wall or floor  Handrail gripping surfaces & fasteners are with 1/8-inch min. radius  Handrails have eased edges & corners  Handrail finishes are cleanable
(b)	toilet room opens onto public area or corridor □ check if not included in project usual privacy is maintained	2.1-7.2.2.12 (2)	NOISE CONTROL:  Noise reduction criteria in Table 1.2-6 applicable to partitions, floors & ceiling construction are met in patient areas
2.1-7.2.2.7 GLA	ZING MATERIALS: Glazing within 1 foot 6 inches of floor □ check if <u>not</u> included in project must be safety glass, wire glass or plastic break-resistant material	2.1-7.2.3 2.1-7.2.3.1 (1) (3) (4)	SURFACES FLOORING & WALL BASES: Flooring surfaces cleanable &     wear-resistant for location Smooth transitions provided     between different flooring materials 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	(b)	<ul> <li>ceiling finishes scrubbable &amp;</li> <li>capable of withstanding cleaning</li> <li>disinfecting chemicals</li> </ul>
	constructed of materials that are not physically affected by germicidal or	(c)	access openings are gasketed
(7)(a)	other types of cleaning solutions Floors are monolithic & integral coved wall bases are at least 6" high & tightly sealed to wall in rooms listed below	2.1-7.2.4 2.1-7.2.4.1	FURNISHINGS built-in furnishings upholstered with impervious materials in patient treatment areas with risks of exposure & contamination from
	Trauma room Airborne infection isolation (AII) room & any anteroom	2.1-7.2.4.3	bodily fluids & other fluids Privacy curtains in patient care areas are washable
2.1-7.2.3.2	WALLS & WALL PROTECTION:	2.1-8.2	HEATING VENTILATION & AIR-CONDITIONING (HVAC) SYSTEMS
(1)(a) (1)(b)	<ul><li>Wall finishes are washable</li><li>Wall finishes near plumbing fixtures are smooth, scrubbable &amp;</li></ul>	Part 3/6.1 Part 3/6.1.1	UTILITIES:  Ventilation Upon Loss of Electrical Power:
(2)	water-resistant  Wall surfaces in areas routinely subjected to wet spray or splatter are monolithic or have sealed seams that are tight & smooth		space ventilation & pressure relationship requirements of Table 7.1 are maintained for AII Rooms, Trauma Rooms in event
(5)	Wall protection devices & corner guards durable & scrubbable	Part 3/6.1.2	of loss of normal electrical power  Heating & Cooling Sources:
2.1-7.2.3.3 (1)	CEILINGS: Ceilings provided in all areas except mechanical, electrical &	Part 3/6.1.2.1	heat sources & essential accessories provided in number & arrangement sufficient to
(a)	communications equipment rooms Ceilings cleanable with routine housekeeping equipment		accommodate facility needs (reserve capacity) even when any one of heat sources or
(b)	Acoustic & lay-in ceilings where used do not create ledges or crevices		essential accessories is not operating due to breakdown or routine maintenance
(2)	Semi-Restricted Areas:  ☐ check if <u>not</u> included in project		capacity of remaining source or sources is sufficient to provide
(a)	<ul> <li>ceiling finishes are scrubbable,</li> <li>non absorptive, non perforated,</li> <li>capable of withstanding</li> <li>cleaning with chemicals</li> </ul>	Part 3/6.1.2.2	heating for trauma rooms  Central cooling systems greater than 400 tons (1407 kW) peak
(b)	lay-in ceilings gasketed or each ceiling tile weighs at least one pound per square foot		cooling load  check if <u>not</u> included in project  number & arrangement of cooling sources & essential
(c)	no perforated, tegular, serrated or highly textured tiles or ceilings of monolithic		accessories is sufficient to support facility operation plan upon breakdown or routine maintenance of any one of cooling sources
(3)	construction  Restricted Areas:	Part 3/6.2 Part 3/6.2.1	AIR-HANDLING UNIT (AHU) DESIGN:  AHU casing is designed to prevent
(a)	<ul> <li>check if <u>not</u> included in project</li> <li>ceilings of monolithic construction (except for central diffuser array)</li> </ul>		water intrusion, resist corrosion & permit access for inspection & maintenance

Part 3/6.3	OUTDOOR AIR INTAKES & EXHAUST DISCHARGES:	Part 3/6.4	FILTRATION: Two filter banks for inpatient care
Part 3/6.3.1 Part 3/6.3.1.1	Outdoor Air Intakes:  located min. of 25'-0" from cooling towers & all exhaust & vent discharges outdoor air intakes located such that bottom of air intake is at least 6'-0" above grade air intakes located away from public access		(see Table 6.4) Filter Bank No. 1: MERV 7 Filter Bank No. 2: MERV 14 Each filter bank with efficiency of greater than MERV 12 is provided with differential pressure measuring device to indicate when filter needs to be changed
	·	Part 3/6.4.1	Filter Bank No. 1 is placed upstream
Part 3/6.3.1.3	<ul> <li>intakes on top of buildings</li> <li>check if <u>not</u> included in project</li> <li>located with bottom of air</li> <li>intake min. of 3'-0" above</li> <li>roof level</li> </ul>	Part 3/6.4.2  Part 3/6.5  Part 3/6.5.3	of heating & cooling coils Filter Bank No. 2 is placed downstream of all wet-air cooling coils & supply fan HEATING & COOLING SYSTEMS: Radiant heating systems
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"	Part 3/6.7 Part 3/6.7.1	□ check if not included in project ceiling or wall panels with exposed cleanable surfaces or radiant floor heating are provided in AII room, PE room, OR or procedure room AIR DISTRIBUTION SYSTEMS: Maintain pressure relationships
	above bottom of areaway		required in tables 7.1 in all modes of HVAC system operation
Part 3/6.3.2	Exhaust Discharges for Infectious Exhaust Air:  ☐ check if not included in project		Spaces that have required pressure relationships are served by fully ducted return systems or fully
Part 3/6.3.2.1	<ul> <li>ductwork within building is under negative pressure for exhaust of contaminated air (i.e. air from AII rooms)</li> <li>exhaust discharge outlets with</li> </ul>		ducted exhaust systems Inpatient facilities & recovery rooms are served by fully ducted return or exhaust systems
	contaminated air located such that they reduce potential for	Part 3/6.7.2	Air Distribution Devices: supply air outlets comply with Table 6.7.2
Part 3/6.3.2.2	recirculation of exhausted air back into building exhaust discharge outlets with contaminated air is arranged to discharge to atmosphere in vertical direction at least 10 feet	Part 3/6.7.3	Smoke Barriers:  HVAC zones coordinated with compartmentation to minimize ductwork penetrations of fire & smoke barriers.
	above adjoining roof level exhaust discharge outlets from laboratory work area chemical fume hoods discharge with stack velocity of at least 2500 fpm exhaust discharge outlets from AII rooms bronchoscopy & sputum collection exhaust & laboratory work area chemical fume hoods is located not less than 25 feet horizontally from outdoor air intakes, openable windows/doors & areas that are normally accessible to public	Part 3/6.8 Part 3/6.8.1 Part 3/6.8.2	ENERGY RECOVERY SYSTEMS:  □ check if <u>not</u> included in project  _ Located upstream of Filter Bank No. 2  _ AII room exhaust systems or combination AII/PE rooms are not used for energy recovery

Part 3/6.8.3	Energy recovery systems with leakage potential  □ check if not included in project  arranged to minimize potential to transfer exhaust air directly back into supply airstream  designed to have no more than 5% of total supply airstream consisting of exhaust air  not used from these exhaust airstream sources: ED waiting rooms & triage, ED human decontamination, waste anesthesia gas disposal & soiled holding room		<ul> <li>Exhaust air from AII rooms, associated anterooms &amp; toilet rooms is discharged directly to outdoors without mixing with exhaust air from any other non-AII room or exhaust system</li> <li>Exhaust air grille or register in patient room is located directly above patient bed on ceiling or on wall near head of bed</li> <li>Anteroom</li> <li>check if not included in project</li> <li>AII room is at negative pressure with respect to anteroom</li> </ul>
Part 3/7	SPACE VENTILATION		Anteroom is at negative pressure with respect to corridor
Part 3/7.1.a	Spaces ventilated according to Table 7.1	Part 3/7.4.1	Trauma Rooms  ☐ check if <u>not</u> included in project
Part 3/7.1.a.1	Air movement is from clean to less- clean areas		Each TR has individual temperature control
Part 3/7.1.a.3	<ul> <li>Min. number of total air changes</li> <li>required for positive pressure rooms</li> <li>is provided by total supply airflow</li> <li>Min. number of total air changes</li> <li>required for negative pressure rooms</li> </ul>		TR is provided with primary supply diffuser array designed as follows:     airflow is unidirectional downwards & average velocity of diffusers is 25 to 35 CFM/ft²     diffusers are concentrated to
Part 3/7.1.a.4	is provided by total exhaust airflow Entire minimum outdoor air changes per hour required by Table 7.1 for each space meet filtration requirements of Section 6.4		provide airflow pattern over patient & surgical team coverage area of primary supply diffuser array extends min. 12" beyond footprint of surgical
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 a single space provides min. MERV 6 filter located upstream of any cold surface so that all of air passing over cold surface is filtered		table on each side  no more than 30% of portion of primary supply diffuser array is used for non-diffuser uses  additional supply diffusers provided within room outside of primary supply diffuser array  check if not included in project each OR has at least two low sidewall return or exhaust grilles spaced at opposite corners or
Part 3/7.2	ADDITIONAL ROOM-SPECIFIC REQUIREMENTS:		as far apart as possible with bottom of these grilles installed approximately 8" above floor
Part 3/7.2.1	Airborne Infection Isolation (AII) Rooms $\Box$ check if <u>not</u> included in project	2.1-8.3	ELECTRICAL SYSTEMS
	AII rooms have permanently installed device and/or mechanism to constantly monitor differential air pressure between room & corridor Local visual means is provided to indicate whenever negative differential pressure is not maintained Air from AII room is exhausted	2.1-8.3.2 2.1-8.3.2.2 (1)	ELECTRICAL DISTRIBUTION & TRANSMISSION  Panelboards:  panelboards serving life safety branch circuits serve floors on which they are located & floors immediately above & below
	directly to outdoors	(2)	panelboard critical branch circuits serve floors on which

they are located

(3)	panelboards not located in exit enclosures or exit passageways	(2)	<ul><li>heated potable water</li><li>distribution systems serving</li><li>patient care areas are under</li></ul>
2.1-8.3.2.3	Ground-Fault Circuit Interrupters in Critical Care Areas:		constant recirculation non-recirculated fixture branch
(2)	<ul> <li>check if <u>not</u> included in project</li> <li>each receptacle individually protected by single GFCI device</li> </ul>	(3)(a)	piping max. length 25'-0"  no installation of dead-end piping (except for empty risers
2.1-8.3.3	POWER-GENERATING & -STORING EQUIPMENT	(3)(c) (3)(b)	mains & branches for future use) any existing dead-end piping is removed
2.1-8.3.3.1 (1)	<ul><li>Essential electrical system or</li><li>emergency electrical power</li><li>essential electrical system</li></ul>	(4)(a)	<ul> <li>check if <u>not</u> included in project</li> <li>water-heating system supplies</li> <li>water at temperatures &amp;</li> </ul>
(2)	complies with NFPA 99 emergency electrical power		amounts indicated in Table 2.1-4
2.1-8.3.5	complies with NFPA 99  ELECTRICAL EQUIPMENT	2.1-8.4.2.6 (1)(a)	Drainage Systems: drainage piping installed above ceiling of or exposed in rooms
2.1-8.3.5.1	Handwashing sinks that depends on building electrical service for operation are connected to essential electrical system  □ check if not included in project		listed below piping have special provisions (e.g. double wall containment piping or oversized drip pans) to protect space below from leakage & condensation
2.1-8.3.5.2	Electronic health record system servers & centralized storage provided with uninterruptible power supply		<ul> <li>Procedure rooms</li> <li>Trauma rooms</li> <li>Electronic data processing areas</li> </ul>
2.1-8.3.6 2.1-8.3.6.1 (1)	Receptacles In Corridors:  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	(1)(b)	Electric closets     drip pan for drainage piping     above ceiling of sensitive area     check if <u>not</u> included in project     accessible     overflow drain with outlet     located in normally
2.1-8.3.6.3 (1)	Essential Electrical System Receptacles: cover plates for electrical	(2)	occupied area that is not open to restricted area Floor Drains:
(1)	receptacles supplied from essential electrical system are	(2) (a)	no floor drains in trauma rooms
(2)	distinctively colored or marked for identification same color is used throughout facility	2.1-8.4.3 2.1-8.4.3.1(1)	PLUMBING FIXTURES  Materials used for plumbing fixtures are non-absorptive & acid-resistant
2.1-8.4 2.1-8.4.2	PLUMBING SYSTEMS Plumbing & Other Piping Systems:	2.1-8.4.3.2 (1)	Handwashing Station Sinks: sinks in handwashing stations are designed with basins that
2.1-8.4.2.1(3)	<ul> <li>no plumbing piping exposed overhead or on walls where possible accumulation of dust or</li> </ul>		will reduce risk of splashing to areas for direct patient care & medication preparation
2.1-8.4.2.5	soil may create cleaning problem Heated Potable Water Distribution Systems:	(2)	<ul> <li>sink basins have nominal size of no less than 144 square inches</li> <li>sink basins have min. dimension</li> <li>9 inches in width or length</li> </ul>
		(3)	sink basins are made of porcelain, stainless steel or solid-surface materials

(5)	water discharge point min. 10"	2.1-8.5.1.3	Bath Stations:
(7)	above bottom of basin  anchored so that allowable stresses are not exceeded where vertical or horizontal force of 250 lbs. is applied	(1)	<ul> <li>bath station that can be</li> <li>activated by patient lying on floor</li> <li>provided at each patient toilet</li> <li>alarm in these areas can be</li> <li>turned off only at bath station</li> </ul>
(8)	<ul> <li>sinks used by staff, patients, &amp; public have fittings that can be operated without using hands (may be single-lever or wrist blade devices)</li> </ul>	(3)	where it was initiated toilet bath stations located on the side of toilets within 12" of front of toilet bowl & 3'-0" to 4'-0" above floor
(a)	blade handles  check if <u>not</u> included in project  at least 4 inches in length  provide clearance required for operation	2.1-8.5.1.5	Emergency call stations are equipped with continuous audible or visual confirmation to person who initiated the code call
(b)	<ul><li>sensor-regulated water fixtures</li><li>check if not included in project</li><li>meet user need for</li></ul>	2.1-8.5.3	EMERGENCY COMMUNICATION SYSTEM
	temperature & length of time water flows designed to function at all times and during loss of normal power	2.1-8.5.3.1	Emergency-radio communication system provided in each facility operates independently of building's service & emergency power systems during
2.1-8.4.3.4	Ice-Making Equipment: copper tubing provided for supply connections to ice-making equipment	2.1-8.5.3.2	emergencies frequency capabilities to communicate with state emergency communication networks
2.1-8.4.3.5 (1)	Clinical Flushing-Rim Sinks: trimmed with valves that can are operated without hands	2.1-8.6.2	ELECTRONIC SURVEILLANCE SYSTEMS
(a) (b)	(may be single-lever or wrist blade devices) handles are at least 6 in. long	2.1-8.6.2.2	□ check if <u>not</u> included in project monitoring devices are located so they are not readily observable by
(2)	integral trap wherein upper portion of water trap provides visible seal	2.1-8.6.2.3	general public or patients electronic surveillance systems receive power from essential electrical system
2.1-8.4.4	MEDICAL GAS & VACUUM SYSTEMS Station outlets provided as indicated in Table 2.1-3		electrical system
2.1-8.5.1 2.1-8.5.1.1	CALL SYSTEMS		
(1)	Nurse call stations provided as required in Table 2.1-2		
(2)	Nurse call systems report to attended location with electronically supervised visual & audible annunciation as indicated in Table 2.1-2		
(4)	Call system complies with UL 1069 "Standard for Hospital Signaling & Nurse Call Equipment"		
(5)	<ul><li>Wireless nurse call system</li><li>check if <u>not</u> included in project</li><li>complies with UL 1069</li></ul>		