



# VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



#### **HOSPITAL FIRE & LIFE SAFETY**

Part A: General
-----------------

1.	Name of the Hospital		
	Address		
3.	Name & Designation of Authorized Po	erson	
4.	Contact Details [Mob.](s) of Inspection	[Mail]	
6.	Name & ID of Inspecting Officer		
7.	Audit Request No.	Dated	
8.	Date of Last Inspection, if any		
	Details of NOC/FSC from Local Fire Au		
	Until		
	[Please enclose photocopy]		

#### **Part B: Building Details**

_	Part B. Bullulli	<del>-</del>
Sr.	Subject	Detail(s)
No.		
1	Year of Construction	
2	Height (m)	
3	Building Location: At Grade Level/On Podium	
4	Number of Building Blocks	
5	Class of Occupancy	
6	Plot Area (m²)	
7	Number of Floor(s)	
8	Type of Construction: Type1/Type 2/Type	
	3/Type 4 as acclaimed	
9	Number of Basement(s)	
10	Area of Basement(s)	
11	Total Covered Area (m²)	
12	Area of Typical Floor:	
13	Audit Reference Statutes:	
	A. Building Controls Parameters	
	B. Fire & Life Safety Measures	
14	Special risk area(s):	



## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



Part C: Checklists

The detailed fire and life safety requirements on issues as applicable to the hospital building should be collected from the statutes [DCR/Building Bye-laws] and Code & Code of Practice [National Building Code of India & Indian Standards] and tabulated in the "Required" column in the table C.1 through C.19 and whereas the field observations shall be recorded in the column "Provided".

**Table C.1: Means of Access** 

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Width of Access Road to plot/building(m)			C/NC
2	Width of Joining Road (m)			C/NC
3	Curl-de-sac, if any, Distance			C/NC
4	Width of main entrance to plot (m)		C/NC	
5	Height of Arch, if any			
6	Width of Gate (m)			C/NC
7	Building at Grade Level			
	<ul> <li>a. Width of road all around building(m)</li> </ul>			C/NC
	b. Turning Radius (m)			C/NC
	c. Load Bearing Capacity (tons)			C/NC
8	Building on Podium, if applicable			
	Fire Tender Access Width (m)			C/NC
	Building Perimeter Covered (m)			C/NC
	Width of Ramp (m)			C/NC
	Gradient			C/NC



## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



#### Table C.2: Requirements for Glass Façade

Sr.	Subject	Type of Building Protection		Required	Provided	Remarks
No.		Fully Sprinklered	Non Sprinklered			
1	Type of Glass	Tempered	Tempered			
2	Fire Resistance Rating	No Rating Required provided:-  1. Sprinklers are provided within 600 mm from the glass and so installed that full coverage is provided to glass.  2. Building has fire separation of 9 m or more				
3	Type of Glass Assembly	Non Combustible	Non Combustible			
4	Sealing of gaps	All gaps between floor-slabs and facade assembly shall be sealed at all levels by approved fire resistant sealant material of equal fire rating as that of floor slab to prevent fire and smoke propagation from one floor to another.				







5	Operable Panels	<ul> <li>a) Operable panels shall be provided on each floor and shall be spaced not more than 10 m apart measured along the external wall from centre-to-centre of the access openings.</li> <li>b) Such openings shall be operable at a height between 1.2 m and 1.5 m from the floor, and shall be in the form of open able panels (fire access panels) of size not less than 1 000 mm × 1 000 mm opening outwards.</li> </ul>		
		c) The wordings, 'FIRE OPENABLE PANEL  — OPEN IN CASE OF FIRE, DO NOT OBSTRUCT' of at least 25 mm letter height shall be marked on the internal side. d) Such panels shall be suitably distributed on each floor based on occupant concentration. These shall not be limited to cubicle areas and shall also be located in common areas/corridors to facilitate access by the building occupants and fire personnel for smoke exhaust in times of distress.		
6	Selection, design, fabrication, installation, testing and maintenance of glazing system and its materials.	For detailed requirements please see clause 8, Part 6, Structural Design-Section 8, Glass and Glazing, NBC 2016		



## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



### **Table C.3: Surface Materials and Their Applications**

Sr. No.	Class of Finish	Use Locations	Required	Provided	Remarks
1	Class 1	May be used in any situation			
2	Class 2	May be used in any situation, except on walls, facade of the building, staircase and corridors			
3	Class 3	May be used only in living rooms and bed rooms (but not in rooms on the roof) and only as a lining to solid walls and partitions; not on staircases or corridors or facade of the building.			
4	Class 4	These which include untreated wood fiberboards which may be used with due fire retardant treatment as ceiling lining, provided the ceiling is at least, 2.4 m from the top surface of the floor below, and the wall surfaces conform to requirements of class [see Note]			

#### **Table C.4: Means of Egress**

Sr. No.	Subject	Required/ Permitted	Provided	Remarks, if any		
2	Travel Distance			C/NC		
3	Length of Dead-End Corridor, if any			C/NC		
4	Common Path of Travel (m)					
5	Number of Exits			C/NC		
6	Staircases  Location Ventilation No Services except fire installations Non-slippery surfaces Riser (mm) Tread (mm) Nosing			C/NC		
7	Continuity of Means of Egress			C/NC		





8	Exit Doorways					
	<ul><li>Clear Width (mm)</li><li>Height</li><li>Hardware</li></ul>					
	Direction of opening					
9	Capacity of Exits	C/NC				
10	Corridor/Passageways					
	Width (m)					

	Direction of Door Opening	
11	Fire Doors  • Entrance of Stairway  • Lift Lobby  • Horizontal Exit	C/NC
12	Staircase Handrails	C/NC
13	Provision for Firefighting Shaft (Fire Tower):  Number of Firefighting Shaft (Fire Tower)  Fire Resistance Rating of enclosure  Entry door to Tower  Connectivity  Protection of Lobby & Staircase  Facilities in Tower  Talk Back  Hose Reel  Internal Hydrant	C/NC
14	Ramp  • Width (m)  • Slope  • Size of landing at top ⊥  • Handrails on both sides  • Handrail Projection	



## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



15	Means of Egress Lighting
	1.Escape lighting luminaries to be sited:
	a. Within 2 m of each intersection of corridors,
	b. At exits and at each exit door,
	c. Within 2 m of each change of direction in the escape route,
	d. Within 2 m of each staircase so that each flight of stairs receives direct light,
	e. Within 2 m of any other change of floor level,
	f. Outside each final exit and close to it,
	g. Within 2 m of each fire alarm call point,
	h. Within 2 m of firefighting equipment, and
	i. To illuminate exit and safety signs as required by
	the enforcing authority.
	2. Luminance at Floor Level
	3. Double Throw Switch
16	Exit Signage
	1. Location
	2. Directional Sign
	3. Size
	4. Colour
	5. Illumination & Power Supply
	6. Floor Indication Board

Aisle

1. Accessible Route

5. Railing Height (m)

3. Cross Aisle Width (m)

2. Longitudinal Aisle Width (m)

4. Number of Seats from Aisle

**17** 



## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



18	Refuge Area		
	1. Approach		
	2. Segregation		
	3. Capacity		
	4. Location		
	5. Connectivity		
	6. Marking		
	7. Facilities		
	First Aid Box		
	Fire Extinguishers		
	Public Address Speaker		
	Fireman's Talk Back		
	Emergency Lighting		
	Drinking Water		
	Drainage Facility		
	Automatic Sprinkler		
	8. Level Difference		
	9. Restriction on uses		

#### **Table C.5: Fire Door Checklist**

Sr.	Fire Door Check Points	Yes	No	Remarks, if any
No.				
1	Is Door Frame is securely fastened to wall?			
2	Is the glazing intact and fire rated?			
3	Are gazing beads securely fastened and in place?			
4	Is the door closer functioning properly?			
5	Is there any sign of leakage of oil from door closer?			
6	Whether the door leaf is attached to door frame with three hinges?			
7	Is door leaf closing proper?			
8	Pull the door by 75 mm and then leave to check if gets latched properly?			
9	Are intumescent seals continuous, intact and properly attached within the groove?			
10	Is Hold open device if any, working properly?			
11	Is door label in place?			



# VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



#### **Table C.6: Smoke Control & Exhaust**

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Type of Smoke Control & Exhaust System for Areas Above Ground:  Natural Cross Mechanical Pressurization			C/NC
2	Type of System for Areas Below Ground:  • Natural • Cross • Mechanical • Pressurization			C/NC
3	Components of Means of Egress Provided with Smoke Control & Exhaust System:  Exit Access Corridor  Exit Passageways  Exit Stairways  Fire Tower			C/NC
4	Pressurization  • Stairway  • Lift Shaft  • Corridor/Passage ways  • Pressurization Level (outside to protected area)  • Between Protected and Unprotected Area  • Activation of system			C/NC
5	Separation of Means of Egress:  • Exit Access  • Exit Passageways  • Fire Doors			C/NC





6	Smoke Control and Exhaust System from Sub-Surface	C/NC
	Parts of Building:	
	1. Type of System	
	• Non-Ducted	
	• Ducted	
	2. Ducted System	
	• Fire Rating of ducts	
	Separate ducts for different levels	
	Exhaust Outlets Location     County Air	
	3. Supply Air	
	Non-Ducted	
	• Ducted	
	4. Supply Air Duct	
	Height of Supply Air Outlets	
	• FR Rating	
	Supply Air Inlets	
	• Location	
	• Fan Capacity (cfm)	
	5. No. of Air Changes	
	6. Activation Mechanism	
_	7. Rating of Exhaust Fans	2 (2.1.2
7	Smoke Exhaust from Upper Floors Parts of Building:	C/NC
	1. Type of System	
	• Non-Ducted	
	• Ducted	
	2. Ducted System	
	Fire Rating of ducts	
	Exhaust Outlets Location	
	3. Supply Air	
	Non-Ducted	
	• Ducted	
	4. Supply Air Duct	
	Height of Supply Air Outlets	
	Supply Air Inlets Location	
	• Fan Capacity (cfm)	
	5. No. of Air Changes	
	6. Activation Mechanism	
	7. Rating of Exhaust Fans	



# VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list



8	Smoke Exhaust from Atrium	C/NC
	Air Changes	
	Fan Capacity	
	Fan Rating	
	Activation	
9	Performance Testing:	Satisfactory/
	<ul> <li>Check Working with activation of automatic detector/MCP/Flo</li> </ul>	ow Not
	Switches	Satisfactory
	Manual Override Operation	

#### **Table C.8: Comparmentation**

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Number of Compartment(s)  Basements (s)  Upper Floor(s)			C/NC
2	Area of Compartment(s)			C/NC
3	FR Rating			C/NC
4	Protection of Openings in FR Walls/Fire Barriers			C/NC
5	Use of "Fire Stop" at the entry & exit of various services to and from the compartment:  • Ventilation Ducts			
	<ul> <li>Electrical Cables/Conduits</li> <li>Water Pipes</li> </ul>			C/NC C/NC
	<ul> <li>Gas Pipes</li> <li>Communication Cables</li> </ul>			C/NC C/NC C/NC
6	Sealing of Service Ducts/Shafts			C/NC C/NC C/NC C/NC C/NC
7	Entry/Exit to Compartment through Fire Door			C/NC
8	Segregation of Lift Lobby using Fire Door			C/NC
9	Use of Fire/Smoke Damper in Ducts at entry/Exit to /from Compartment			C/NC







10	Protection of Escalator Opening/or any other similar opening:  Depth of Smoke Barrier Provision of Sprinklers	C/NC
11	General Comments on compliance & Maintenance	Satisfactory/ Not Satisfactory





# VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### **Table C.9: Fire Extinguishers**

	Table C.3. Fire Extiliguisher	·		
Sr. No.	Subject	Required	Provided	Remarks, if any
1	Number of Fire Extinguisher on various floors:			C/NC
2	Suitability of Extinguishers to Risk	Comply wit	h standard/ ed	C/NC
3	Installation  Distance Siting Height			C/NC
4	Hydraulic Test			C/NC
5	Discharge Performance			Satisfactory/ Not Satisfactory
6	Life of Extinguishers not more than 10 years			
7	General Maintenance			Satisfactory/ Not Satisfactory

#### Table C.10: Hose Reel

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Number of Hose Reels/Floor			C/NC
2	Length of Hose Reel Hose			C/NC
3	Shut-Off Nozzle			C/NC
4	Height			C/NC
5	Discharge Performance			Satisfactory/ Not Satisfactory
6	General Maintenance			





## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### Table C.11: Wet Riser/Down Comer

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Type of System			C/NC
2	Size of Pipe (mm)			C/NC
3	Number of Wet Riser/Down Comer			C/NC
4	Location			C/NC
5	Accessories      Hose and/or Hydrant Box     Delivery Hoses • Length     • Dia.     • Couplings     Diffuser Branch     Landing Valve			C/NC
5	Discharge Performance  Most favorable area Unfavorable Area			Satisfactory/ Not Satisfactory
6	General Maintenance			C/NC
7	Fire Service Inlet			C/NC





# VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### **Table C.12: Yard Hydrant**

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Number of Yard Hydrants			C/NC
2	Size of Pipe (mm)			C/NC
3	Distance from Building			C/NC
4	Siting near to openings			C/NC
5	Accessories      Hose and/or Hydrant Box     Delivery Hoses     Diffuser Branch     Landing Valve			C/NC
5 6	Discharge Performance  Most favorable area Unfavorable Area General Maintenance			Satisfactory/ Not Satisfactory  Satisfactory/
				Not Satisfactory





## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

**Table C.13: Water Supply** 

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Water Tank for Fire fighting Underground Tank Capacity Overhead Tank Capacity Whether filled with water			C/NC
2	Access to tank     Underground Tank     Overhead Tank			C/NC
3	Depth of UG Tank			C/NC
4	Draw Out Connection			C/NC
5	Access to Draw Out Connection			C/NC
6	<ul> <li>Fire Brigade Collecting Head</li> <li>Location</li> <li>Number of Inlets with NRV</li> <li>Pipe Diameter</li> <li>Marking</li> </ul>			
7	Provision of Manholes			
8	Load Bearing Capacity of Slab if tank is within pathway			
9	Material of Construction			
10	Number of Compartments in tank			
11	General Maintenance		,	Satisfactory/ Not Satisfactory





## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### **Table C.14: Automatic Sprinkler System**

Sr.	Subject	Required	Provided	Remarks,
No.				if any
1.	Sprinkler Head Temperature Rating			C/NC
2.	<ul> <li>Stiting of Sprinkler Head</li> <li>Distance of deflector from ceiling</li> <li>Distance of sprinkler from wall</li> <li>Distance between sprinklers on branch lines</li> <li>Distance between branch lines</li> </ul>			C/NC
3.	Sprinkler above False Ceiling/Voids, If any			C/NC
4.	Discharge Density (lpm/m²)			C/NC
5	Provision of Test Valve on each floor			C/NC
6	Installation Control Valve • Number			C/NC
	• Location			
7	No Welding on Pipes less than 50 mm diameter			C/NC
8	Size of Sprinkler Riser			C/NC
9	Flow Switches     Provision     Audio/Visual Indication on Control Panel			C/NC
10	Sectional Isolation Valve			C/NC
11	Random Test			Performance Satisfactory/ Not Satisfactory





## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### **Table C.15: Automatic Detection & Alarm System**

Sr.	Subject	Required	Provided	Remarks,
No.				if any
1.	Zone(s)/Size of Analog			C/NC
2.	Type of detector(s)			C/NC
3.	Siting Requirement			C/NC
4.	Spacing Requirement			C/NC
5.	Detectors in Ducts (if applicable),			C/NC
6.	Alarming Devices*			C/NC
7.	Alarming Device Sound level			C/NC
8	Control Panel			C/NC
9	Record of maintenance			C/NC
10	Random Test			
	Detector Operation			
	MCP Operation			Performance
	Hooter Operation			Satisfactory/
	Operation of Integrated Devices			Not Satisfactory
	☐ Smoke Venting			
	☐ Recorded messages			
	☐ Fire Damper Operation			





## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### Table C.16: MOEFA/Talk Back/Public Address System

Sr. No.	Subject	Required	Provided	Marks Allotted	Marks Awarded	Remarks, if any
1	Manual Call Points  Required/Not Required Siting Distance Indication on Control Panel Alarming Device					C/NC
2	Talk Back System      Each Floor of Building     Lift, if any					C/NC
3	Public Address System					C/NC
4	Performance Test:					Performance Satisfactory/ Not Satisfactory





## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### Table C.17: Fire Pump(s) & Fire Pump House

Sr.	Subject	Required	Provided	Remarks, if
No.				any
1	Total number of Hydrants*			C/NC
	Yard Hydrants			
	Internal Hydrants			
2	Total Number of Pump Set(s)			C/NC
3	Provision of Pumps			C/NC
	A. Hose Reel			
	B. Sprinkler in Basement			
	C. Wet Riser/Down Comer			
	• Jockey			
	• Main			
	• Standby			
	D. Automatic Sprinkler System			
	• Jockey			
	• Main			
	• Standby			
4	Power Supply to pumps			C/NC
5	Pump for Firefighting (main)			C/NC
	<ul> <li>At ground/below ground</li> </ul>			
	<ul> <li>Discharge</li> </ul>			
	• Head			
	Shut-off Head			
	Start Pressure Setting			
	At Terrace			
	<ul> <li>Discharge</li> </ul>			
	• Head			
	Shut-off Head			
	Starting Pressure			
6	Pump for Firefighting (Standby)			C/NC
	<ul> <li>At ground/below ground</li> </ul>			
	<ul> <li>Discharge</li> </ul>			
	• Head			
	Shut-off Head			
	<ul> <li>Starting Pressure</li> </ul>			





8	Pump for Firefighting (Jockey)  • At ground/below ground  • Discharge  • Head  • Shut-off Head  • Starting Pressure  Feed to Pumps  • Positive  • Negative			C/NC
9	Pressure at remotest hydrant			C/NC
10	Performance testing			Satisfactory/ Not Satisfactory
11	General Maintenance			Satisfactory/ Not Satisfactory
	PL	JMP HOUSE		
Sr. No.	Subject	Required	Provided	Remarks, if any
1	Location			
2	Direct Access			
3	Entry/Exit			
4	Separation from Rest of Area			
5	Ventilation			
6	<ul> <li>Spacing of Pumps</li> <li>From the Walls</li> <li>Between the Pumps</li> <li>Pump Panel Protection</li> </ul>			
7	Pump Markings			
8	Air Release Valve			
9	Pressure Gauges on each pump			
10	General Maintenance		•	





## VOLUNTARY FIRE SAFETY INSPECTION SCHEME (An IFE-AHPI initiative) Inspection Check list

#### **Table C.18: Details of other Requirements**

Sr. No.	Subject	Required	Provided	Remarks, if any
1	Fire Safety Plan			C/NC
2	Periodic Drills			C/NC
3	Training of Personnel			C/NC
4	Fire Safety Officer			C/NC

#### Table C.19: Maintenance of Fire & Life Safety Systems

Sr. No.	Subject	Remarks, if any
1	Unobstructed means of access to and around the building	C/NC
2	Availability of unobstructed, properly marked, well illuminated and protected means of egress.	C/NC
3	Compartmentation: Fire Door-condition, door closer, gaps, seal etc, sealing of shafts, dampers, etc.	C/NC
4	Smoke Control and Exhaust System including activation mechanism	C/NC
5	Automatic detection and alarm including talk back, MCP, Public address system.	C/NC
6	Condition of fire extinguishers	C/NC
7	Working of hose reel	C/NC
8	Automatic sprinkler system: condition of sprinkler heads, valves, ICV, test valves, flow switches, out of sight sprinklers, draw out, fire service inlet etc.	C/NC
9	Water supply: availability, tank cleanliness, quality of water, hydrants: condition of lugs, washer, approach, control valves, hose box: condition of hose & box, availability of branch etc.	C/NC
10	Pump & Pump house: general maintenance of pumps, prime movers, valves, pressure gauges, leakage, access to pump house, illumination, markings etc.	C/NC
11	Up to date fire safety plan, training of personnel, general awareness, conduct of mock drills, and general house- keeping etc.	C/NC