## CHECK LIST/SELF APPRAISAL OF FIRE SAFETY MEASURES IN EDUCATIONAL BUILDINGS ABOVE 6 METERS AND BELOW 15 METERS HEIGHT.

A	Name and Address of the Educational Institute and its Owner(s)			
В	Name and Address of the correspondent/ Head of the instate with contact Telephone No.			
С	Total height of the Educational Institution Building in Metres			
D	Total number of floors in the building			
Е	Total built-up area of all floors in Square Metres			
1*	Whether the Educational Building is of permanent construction?	Yes	No	
2*	Whether the Educational Institute is a Recognized/Registered one?	Yes	No	
3*	TYPE OF CONSTRUCTION Whether the permanent educational building is of TYPE 1 construction as per clause 4.1 of IS.14435:1997?	Yes	No	
4	Whether the non-permanent educational building is of TYPE 2 or TYPE 3 construction as per clause 4.1 of IS.14435:1997?	Yes	No	NA
5	Whether <b>Residential</b> / <b>Hostel</b> facility provided in the building			
6	Whether the non-permanent educational building is restricted to ground and one upper floor only with floor area not exceeding 1000 m2 on each floor as per clause 4.2 of IS 14435:1997?	Yes	No	NA
7*	Whether the educational Institution is not housed in temporary structures with roofs of tent, thatched or any other combustible materials as per clause 4.2 of IS 14435:1997?	Yes	No	
8*	OCCUPANT LOAD  No. of Class rooms and students in:  a) Ground Floor.			
	b) First Floor.			
	c) Second Floor.			
	d) Third Floor.			
	NOTE: The permissible occupant load of the educational building may be obtained by dividing total built up area per floor by 4 M <sup>2</sup> as laid down in table 20 under clause 4.3, Part 4 of NBC, 2005 and as per clause 5.1 of IS14435:1997?			
9	Set Backs	Yes	No	
	Whether minimum 6 mtrs open space is provided on front side of the school building			
10	Whether 6 mtrs open space is provided on the rear side of the School building	Yes	No	
11	Whether 6 mtrs open space is provided on side 1 of the school building	Yes	No	
12	Whether 6 mtrs open space is provided on side of the school building	Yes	No	

13*	ARRANGEMENTS OF EXITS			
	Whether the upper floors of the educational building are provided with exits for every travel distance of 30 meters (TYPE 1 & 2 constructions) as per table 22 under clause 4.4.1, 4.5.1 and 4.5.2, Part 4 of NBC, 2005?			
	NOTE: For TYPE 3 & 4 constructions the travel distance is 22.5 Meters.			
14*	Whether no TYPE 4 construction (with structural elements of one hour fire resistance) was allowed for construction of Educational building as per clause 6.1 of IS 14435:1997?	Yes	No	
	NOTE: Type 4 construction with structural elements less than one hour fire resistance is not permissible.			
15*	Whether the minimum number of two separate exits are provided for each floor as per clause 6.2 of IS 14435:1997?	Yes	No	
16*	Whether the exits are remote from each other as practicable as per clause 6.2 of IS 14435:1997?	Yes	No	
17	Whether the "FIRE ESCAPES" are kept always in sound operating conditions as per clause 6.5 of IS 14435:1997?	Yes	No	
18*	Whether the height of corridors and passage ways is more than the aggregate required width of the exit door ways as per clause 7.2 of IS 14435:1997?	Yes	No	
19*	Whether all the internal stair cases, lift, lobbies and corridors are adequately ventilated and illuminated as per clause 7.3 of IS 14435:1997?	Yes	No	
20*	DOOR WAYS	Yes	No	
	Whether every room with a capacity of 45 persons in area is provided at least two door ways as per clause 6.3 of IS 14435:1997?			
21*	Whether the width of all exit door ways is 10-00 meter and more in respect of class rooms and 02-00 meters and more in respect of Assembly halls as per clause 8.1 of IS 14435:1997?	Yes	No	
22*	Whether the height of exit door ways is 02-00 meters and more, as per clause of 8.2 of IS 14435:1997?	Yes	No	

Yes	No	
Yes	No	
Yes	No	NA
Yes	No	
Yes	No	NA
Yes	No	
Yes	No	
Yes	No	NA
Yes	No	NA
Yes	No	NA
Yes	No	NA
	Yes Yes Yes Yes Yes Yes Yes	Yes No

33	Whether the width of the staircase width of treads, height of riser and number of risers per each flight, height of railing and gap between verticals as mentioned below are provided as per clause 9.2.6, 9.2.7 & 9.2.8 of IS 14435:1997?	Yes	No	NA
	1. width of staircase: -not less than 01.50 meters			
	2. width of treads:not less than 300 mm			
	3. Height of the riser:not less than 150 mm			
	4. Number of risers:15 risers per each flight			
	5. Height of railing:not more than 01-00 meters			
	6. Gap Between Verticals:not exceeding 200mm			
	NOTE:Spiral type staircases are not permissible.			
34	EXTERNAL STAIR CASES	Yes	No	NA
	Whether all the external staircases are directly connected to the ground as per clause 9.3.1 of IS 14435:1997?			
35	Whether the entrances to the external staircases are separate and remote form the internal staircases as per 9.3.1 of IS 14435:1997?	Yes	No	NA
36	Whether no wall opening or windows opening are provide on to or close to external staircases as per 9.3.3 of IS 14435:1997?	Yes	No	NA
37	Whether the routes to the external staircases are kept free from obstructions at all times as per clause9.3.4 of IS 14435:1997?	Yes	No	NA
38	Whether the external staircase is constructed with non-combustible materials as per clause 9.3.5 of IS 14435:1997?	Yes	No	NA
39	Whether the doorway latching to the internal staircase is of required rate of fire resistance as per clause 9.3.5 of IS 14435:1997?	Yes	No	NA

40	Whether the width of external staircase, width of treads, height of riser, number of risers to flight, height of hand rails as mentioned below are provided as per clause 9.3.7 and 9.3.8 of IS 14435:1997?	Yes	No	NA
	1. width of staircase: -not less than 01.25 meters			
	2. width of treads:not less than 250 mm			
	3. Height of the riser:not less than 190 mm			
	4. Number of risers:15 risers per each flight			
	5. Height of railing:not more than 01-00 meters and			
	not exceeding 1.20 meters.			
	NOTE:Spiral type staircases are not permissible.			
41	Whether the exit requirements are provided as required to the occupancy of higher hazard as per National Building Code of India, 2005 (Part 4) to an Educational Building which got a mixed occupancy	Yes	No	NA
42	AIR CONDITIONING	Yes	No	NA
	Whether the school is provided with central Air-conditioning System?			
	NOTE:If Central Air-conditioning is provided all safety measures as per Clause 10.1 of IS 14435:1997.			
43	RESTRICTION OF SPREAD OF FIRE AND SMOKE	Yes	No	NA
	Whether the laboratories are located in separate blocks / adequate precautions taken as per clause12.3 of IS 14435:1997?			
44	Whether the hazardous chemicals are stored separately with due precautions as per clause12.3 of IS 14435:1997?	Yes	No	NA
45	Whether the reactive and hazardous nature chemicals are stored separately in appropriate receptacles (closed) properly labeled their names and chemical characteristics as per clause12.3 of IS 14435:1997?	Yes	No	NA
46*	Whether the enclosed precautions at Annexure-I are followed while using any Gas for burners etc., in laboraters/kitchens as per clause 12.4 of IS 14435:1997?	Yes	No	

47	ELI	ECTRICAL EQUIPMENT AND SAFETY	Yes	No	NA
	are	ether the Transformer building or HT & LT control panels housed in separate rooms and properly protected with ring as per clause 13.1 of IS 14435:1997?			
48		ether the staircase and corridor lighting is having separate trical circuits as per clause 13.2 of IS 14435:1997?	Yes	No	NA
49	brea	ether miniature circuit breakers or earth leakage circuit akers are provided in the circuits as per clause 13.3 of IS 35:1997?	Yes	No	NA
50	FIR	RE SAFTEY MEASURES	Yes	No	NA
	real tank	ether the following requirements of Fire extinguishers, hose, down comer installations and capacity of water storage as and fire pumps are provided as given below as per Table Part 4, National Building Code of India, 2005?			
	LES	SS THAN 15 METERS IN HEIGHT			
	A)	FOR BUILDINGS WITH GROUND + ONE STOREY:			
		i) Fire Extinguishers as per IS 2190 (Two No. of 9 Lts., Water expelling extinguishers for every 600 M <sup>2</sup> with minimum of 4 Extinguishers per compartment/Floor. The Extinguishers should be so located as to be available within 25 meters radius, Two No. of 2.5 Kgs. CO <sub>2</sub> extinguishers in each floor).	Yes	No	NA
		ii) Automatic sprinklers in Basement with One Electrical Pump of 450 LPM and Terrace Tank of 5,000 Liters if area exceeds 200 M <sup>2</sup> .	Yes	No	NA
	B)	FOR BUILDINGS WITH GROUND+TWO OR MORE STOREYS:			
		i) Fire Extinguishers as per IS 2190 : 1992 (Two No. of 9 Lts., Water expelling extinguishers for every 600 M <sup>2</sup> with minimum of 4 Extinguishers per compartment/Floor. The Extinguishers should be so located as to be available within 25 meters radius, Two No. of 2.5 Kgs. CO <sub>2</sub> extinguishers in each floor).	Yes	No	NA
		ii) Automatic sprinklers in Basement if area exceeds 200 M <sup>2</sup> .	Yes	No	NA
		iii) Hose Reel in all Floors.	Yes	No	NA D. 7

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	iv) Terrace Tank of 10,000 Liters (15,000 Liters if basement are exceeds 200 M <sup>2</sup>	Yes	No	NA
	v) Electrical Pump of 450 LPM capacity (900 LPM capacity if basement area exceeds 200 M <sup>2</sup> ) at the Terrace level.	Yes	No	NA
51	Twelve fire buckets of 12 inches height and 10 inches deep always filled half the number with water and half with sand arranged to a stand should be provided and maintained separately at kitchen room, library and auditorium areas,	Yes	No	
52	Twelve fire buckets of 12 inches height and 10 inches deep always filled with dry sand arranged to stand should be provided and maintained at laboratory area.	Yes	No	
53*	EMERGENCY AND ESCAPE LIGHTING  Whether the emergency lighting is powered from a source independent of that supplying normal lighting?	Yes	No	
50*	Whether the emergency lighting system is of adequate capacity of continuous operation for minimum duration of 1 1/2 hour even for smallest premises. As per clause 15.5 of I.S 14435:1997?	Yes	No	
54*	Whether the emergency lighting system is well maintained by conducting periodical inspections and tests so as to ensure their perfect serviceability at all times as per clause 15.6 of I.S 14435:1997?	Yes	No	
55*	<ul> <li>Whether the escape lighting is capable of the following as per clause 15.7 of I.S 14435:1997?</li> <li>a) Indicating clearly under un-ambiguously the escape routes.</li> <li>b) Providing adequate illumination along such routes to allow safe movements.</li> <li>c) Ensuring that fire alarm call point, fire fighting equipments provided along the escape routes can be readily located</li> </ul>	Yes	No	
56*	Whether all the main gates and the doorways of all classrooms are kept open during the period of occupation?	Yes	No	
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57	ADVISORY FIRE SAFETY MEASURES	Yes	No	
	Whether the teaching and non-teaching staff or any of the able students under went any first aid fire fighting training?			
58	Whether "FIRE DRILS" are conducting involving all the concerned once in 3 months for an initial period of one year and subsequently once in 6 months?	Yes	No	
59	Whether the available first aid fire fighting appliances are well maintained by conducting periodical inspections and tests to ensure perfect serviceability of them?	Yes	No	
60	Whether any record is being maintained to the above extent?	Yes	No	
61	Whether any special care towards the physically handicapped persons is planned to help them during fire or similar emergencies	Yes	No	
62	Whether the teaching staff or management is taking any efforts to create\" FIRE AWARENESS TO STUDENTS"	Yes	No	
63	Whether perfect good house keeping is maintained at all the places at all the times	Yes	No	
64	Whether the store room, office room, library and laboratory sections are well maintained without any scope for fire accident out of any cause including "electrical origin"	Yes	No	
65	Whether there is adequate safe open place for assembly point within the premises	Yes	No	
66	Whether any action plans are under implementation for the safe evacuation in the event of fire or similar emergencies	Yes	No	

## SIGNATURE OF OWNER

Standards referred: Indian Standard 14435:1997 Code of practice for Fire safety in Educational Institutions.

\*Note: The Fire Safety Measures indicated with star mark are mandatory.

## **Recommended / Not Recommended for issue NOC** (if not Recommended Reasons should be furnished.

## **Signature of inspecting Officers**

1) 2)