



**GOVERNMENT OF TELANGANA
STATE DISASTER RESPONSE & FIRE SERVICES
DEPARTMENT NO OBJECTION CERTIFICATE
FOR OCCUPANCY**



From
The Director General
State Disaster Response and Fire Services,
Telangana, Hyderabad.

To,
Hi-Tech Scholars Residential School
C/o Sri.P Harigopal,
Survey No.268,
Ragahvendra nagar,
Athvelly(V), Medchal(M),
Medchal-Malkajgiri District, Telangana

Ack. No. 035/RFO/HYD/2021 Dated: 04/10/2021

Sir,

Sub: TELANGANA STATE DISASTER RESPONSE & FIRE SERVICE
DEPARTMENT –
Issue of No Objection Certificate for Occupancy to the Multi storeyed
Building of Hi-Tech Scholars Residential School, C/o Sri.P
Harigopal, Survey No.268, Ragahvendra nagar, Athvelly(V),
Medchal(M), Medchal-Malkajgiri District, Telangana
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Regarding.

Ref: 1. Acknowledgement No 035/RFO/HYD/2021
2. This Office Provisional NOC Ack/RC No.0 dt.
3. Multi-Storeyed Building Inspection Committee Report,
Hyderabad Ack. No. 035/RFO/HYD/20211, dt.
04/10/2021

The Multi Storeyed Building Inspection committee, vide reference cited (3) has inspected the Multi Storeyed Building of of **Hi-Tech Scholars Residential School, C/o Sri.P Harigopal, Survey No.268, Ragahvendra nagar, Athvelly(V), Medchal(M), Medchal-Malkajgiri District, Telangana** on 04/10/2021 and submitted the following report.

2) The builder was issued Provisional No Objection certificate vide reference cited (2) for construction of Multi Storeyed Building, **G+2 Floors**, with for **EDUCATIONAL B-2 All others/training institutions**. Now the builder has constructed the Multi Storeyed Building with **G+2 Floors** with a height of **10.30 Meters** for **EDUCATIONAL B-2 All others/training institutions** Occupancy and requested for No Objection Certificate for Occupancy.

3) Open Spaces: The builder provided the following open spaces all around the building.

	Sl.No	Side	Open space Required as per Provisional No Objection Certificate	Open space Provided
a	1	North	7.00	0.80
	2	South	7.00	0.00
	3	East	7.00	2.20
	4	West	7.00	4.00

This is not stepped type building.

b	Sl. No	Gate Width As per NBC 2016	Required	Provided
	1	Entry gate width	4.50	N/A
	2	Entry Gate Head Clearance	5.00	N/A
	3	Exit Gate Width	4.50	N/A
	4	Exit Gate Head Clearance	5.00	N/A

6. Travel Distance

Sl.	Item / Description	Required (Not More	Required (Not more than in Mtrs)	Provided
1	Farthest point (Most Remote Point) With in a storey or a mezzanine floor to he door to an Exit.		30.00	15.00
2	The Dead end of the corridor length in exit access. (6 mtrs for Educational, Institutional and Assembly, 15mtrs for other Occupancies)		6.00	6.00

7. Stair Cases (As per NBC 2016)

Sl.no	Type of staircases	Width (In Mtrs)	No of staircases	Floors from	Floors to
1	Internal staircases	1.50	0	Cellar	Terrace

8) Means of Escape Floor Wise Details-Building No:1

Sl.no	Floor type	Buil-up Area in Sq.Mtrs	Type of Occupancy	Occupant Load	Means of escape required as per table 21 of NBC	Means of escape Provided
1	Ground	557.62		212.00	2.12	4.05
2	1st Floor	557.62	EDUCATIONAL B-2 All others/training institutions	212.00	2.12	4.05
3	2nd Floor	557.62	EDUCATIONAL B-2 All others/training institutions	212.00	2.12	4.05

9). Fire Shaft as per clause 2.24 and ANNEX E (E-2) of part 4 NBC 2016.

Item / Description	Required	Provided
Fire Shaft / Fire Lift	1	0

10). Floor Wise details of Fire Fighting Installations:

Sl.no	Floor Details	Fire Extinguisher	Hose Reel	Automatic Sprinklers System	Manually Operated Electronic Fire Alarm System	Automatic detection and alarm system
1	Ground	5.00	1.00	0.00	1.00	0.00
2	1st Floor	5.00	1.00	0.00	1.00	0.00
3	2nd Floor	5.00	1.00	0.00	1.00	0.00

11). Fire Fighting Installations as per Table 7 of NBC 2016 .

Fire Fighting System.	Required As per NBC	Provided
Fire Extinguishers	30.00	8
First Aid Hose Reel	7.00	6
Down Comer	1.00	2
Manually Operated Electronic Fire Alarm Systems	7.00	6
Terrace Tank over Respective Tower Terrace in Litres	50000.00	40000
Pump Capacity in LPM at the Terrace Tank Level with Minimum Pressure of 3.5 kg/cm ²	1800.00	1800

12). The builder has provided the following additional Fire Safety Requirements as per NBC of India 2016:

S.no	Fire safety Item
1	<p>Floor Openings Fire Protection as per Clause 3.4.5.4</p> <p>a) Openings in Service ducts and shafts allowing building services like cables, Electrical wirings, Telephone cables, plumbing pipes etc., shall be protected by enclosure in the form of ducts / shaft having a fire resistant's not less than 120 min.</p> <p>b) The inspection door for electrical shafts / ducts have fire resistance rating of 120 min</p> <p>c) Medium and low voltage wiring running in shafts / ducts are armoured type or run through metal conduits.</p> <p>d) The space between the electrical cables/conduits and the walls/slabs are filled in by a fire stop material having fire resistance rating of not less than 120 min. This shall exclude requirement of fire stop sealing for low voltage services shaft. For plumbing shafts in the core of the building, with shaft door opening inside the building, the shafts shall have inspection doors having fire resistance rating not less than 30 min</p> <p>e) For plumbing shafts in the core of the building, with shaft door opening inside the building, the shafts shall have inspection doors having fire resistance rating not less than 30 min</p>

	<p>Vertical openings Fire Protection as per Clause- 3.4.5.6</p> <p>a) Every vertical opening between the floors of a building is suitably enclosed or protected, as necessary, to provide the following:</p> <p>Reasonable safety to the occupants while using the means of egress by preventing spread of fire, smoke, or fumes through vertical openings from floor to floor to allow occupants to complete their use of the means of egress. Further it shall be ensured to provide a clear height of 2 100 mm in the exit access.</p> <p>b) Limitation of damage to the building and its contents.</p>
3.	<p>Electrical Installation as per Clause – 3.4.6</p> <p>(For requirements regarding installations from the point of view of fire safety, reference may be made to good practice [4(6)] and 8. Building Services, Section 2 Electrical and Allied Installations. Of the Code.)</p> <p>a) In general, it is desirable that the wiring and cabling are with flame retardant property. Medium and low voltage wiring running in shafts and within false ceiling shall run in metal conduit. Any 230 V wiring for lighting or other services, above false ceiling, shall have 660 V grade insulation.</p> <p>b) The electric distribution cables/wiring are laid in a separate shaft. The shaft is sealed at every floor with fire stop materials having the same fire resistance as that of the floor. High, medium and low voltage wiring running in shaft and in false ceiling shall run in separate shaft/conduits.</p> <p>c) Water mains, gas pipes, telephone lines, intercom lines or any other service line shall not be laid in the duct for electrical cables; use of bus ducts/solid rising mains instead of cables is preferred.</p>
18.	<p>General Exit Requirements as per clause – 4.2 4.2.3</p> <p>a) Every exit, exit passageway and exit discharge shall be continuously maintained free of all obstructions or impediments to full use in the case of fire or other emergency.</p> <p>4.2.7b) For non-naturally ventilated areas, fire doors with 120 min fire resistance rating shall be provided and particularly at the entrance to lift lobby and stair well where a 'funnel or flue effect' may be created, inducing an upward spread of fire, to prevent spread of fire and smoke.</p> <p>4.2.9c) Doors in exits shall open in the direction of exit. In case of assembly buildings (Group D) and institutional buildings (Group C-1), exit door shall not open immediately upon a flight of stair and all such entries to the stair shall be through a landing, so that such doors do not impede movement of people descending from a higher floor when fully opened (see Fig. 4A). While for other occupancies, such doors shall not reduce the pathway in the landing by more than half the width of such staircase (see Fig. 4B). Over-head or sliding doors shall not be installed.</p> <p>4.2.11d) Unless otherwise specified, all the exits and exit passageways to exit discharge shall have a clear ceiling height of at least 2.4 m. However, the height of exit door shall be at least 2.0 m (see Fig. 5).</p> <p>4.2.16e) Suitable means shall be provided so that all access controlled exit doors, turnstiles, boom barriers and other such exits shall automatically operate to open mode during emergencies like fire, smoke, acts of terrorism, etc, so that people can safely and quickly egress into safe areas outside. If required, a master controlling device may be installed at a strategic location to achieve this.</p> <p>4.2.17f) Penetrations into and openings through an exit are prohibited except those necessary like for the fire protection piping, ducts for pressurization and similar life safety services. Such openings as well as vertical passage of shaft through floors shall be protected by passive systems.</p>
19.	<p>Exit Access as per Clause – 4.4.1</p> <p>a) In order to ensure that each element of the means of egress can be effectively utilized, they shall all be properly lit and marked. Lighting shall be provided with emergency power back-up in case of power failures.</p>
29.	<p>Fire Extinguishers/Fixed Firefighting Installations as per clause – 5.1 5.1.1 All buildings depending upon the occupancy use and height shall be protected by fire extinguishers, hose reels, wet riser, down-comer, yard hydrants, automatic sprinkler installation, deluge system, high/medium velocity water spray, foam, water mist systems, gaseous or dry powder system, manual/automatic fire alarm system, etc, in accordance with the provisions of various clauses given below, as applicable:</p> <p>a) These fire extinguishing equipment and their installation shall be in accordance with accepted standards [4(17)]. The extinguishers shall be mounted at a convenient height to enable its quick access and efficient use by all in the event of a fire incidence. The requirements of fire extinguishers/yard hydrant systems/wet riser/down-comer installation and capacity of water storage tanks and fire pumps, etc, shall be as specified in Table 7. The requirements regarding size of mains/risers shall be as given in Table 8. The typical arrangements of down-comer and wet riser installations are shown in Fig. 13. The</p>

wet riser shall be designed for zonal distribution ensuring that unduly high pressures are not developed in risers and hose- pipes.

b) First-aid firefighting appliances shall be provided and installed in accordance with good practice [4(18)]. The firefighting equipment and accessories to be installed in buildings for use in firefighting shall also be in accordance with the accepted standard [4(17)] and shall be maintained periodically so as to ensure their perfect serviceability at all times.

c) Valves in fixed firefighting installations shall have supervisory switch with its signalling to fire alarm panel or to have chain(s), pad lock(s), label and tamper-proof security tag(s) with serial number to prevent tampering/unauthorized operation. These valves shall be kept in their intended open position.

d) In addition to wet riser or down-comer, first- aid hose reels shall be installed in buildings (where required under Table 7) on all the floors, in accordance with accepted standard [4(19)]. The first-aid hose reel shall be connected directly to the riser/down-comer main and diameter of the hose reel shall not be less than 19 mm.

e) Wet risers shall be interconnected at terrace level to form a ring and cut-off shall be provided for each connection to enable repair/ maintenance without affecting rest of the system.

f) Pressure at the hydraulically remote hydrant and at the highest hydrant shall not be less than 3.5 bar. The pressure at the hydrants shall however not exceed 7.0 bar, considering the safety of operators. It may be planned to provide orifice plates for landing valves to control pressure to desired limit especially at lower levels; this could also be achieved through other suitable means of pressure reducing devices such as pressure controlled hydrant valves.

g) Hydrants for firefighting and hose reels shall be located in the lobby in firefighting shaft. Those hydrants planned to be provided near fire exit staircase on the floor shall be within 5 m from exit door in exit access. Such hydrant cabinet may finish with doors to meet interior finishes with requirement of glass panel to provide visibility to the installations inside and inscribed with the word: FIRE HOSE CABINET of letter size 75 mm in height and 12 mm in width. Such door of the fire hose cabinet need not be fire resistant rated. The location of such cabinets shall be shown on floor plan and duly displayed in the landing of the respective fire exit staircase.

4.2.9c) Doors in exits shall open in the direction of exit. In case of assembly buildings (Group D) and institutional buildings (Group C-1), exit door shall not open immediately upon a flight of stair and all such entries to the stair shall be through a landing, so that such doors do not impede movement of people descending from a higher floor when fully opened (see Fig. 4A). While for other occupancies, such doors shall not reduce the pathway in the landing by more than half the width of such staircase (see Fig. 4B). Over- head or sliding doors shall not be installed.

4.2.11d) Unless otherwise specified, all the exits and exit passageways to exit discharge shall have a clear ceiling height of at least 2.4 m. However, the height of exit door shall be at least 2.0 m (see Fig. 5).

4.2.16e) Suitable means shall be provided so that all access controlled exit doors, turnstiles, boom barriers and other such exits shall automatically operate to open mode during emergencies like fire, smoke, acts of terrorism, etc, so that people can safely and quickly egress into safe areas outside. If required, a master controlling device may be installed at a strategic location to achieve this.

4.2.17f) Penetrations into and openings through an exit are prohibited except those necessary like for the fire protection piping, ducts for pressurization and similar life safety services. Such openings as well as vertical passage of shaft through floors shall be protected by passive systems.

Exit Access as per Clause – 4.4.1

19. a) In order to ensure that each element of the means of egress can be effectively utilized, they shall all be properly lit and marked. Lighting shall be provided with emergency power back-up in case of power failures. Also, exit signs of adequate size, marking, location, and lighting shall be provided so that all those unfamiliar with the location of the exits may safely find their way.

29.

Fire Extinguishers/Fixed Firefighting Installations as per clause – 5.1 5.1.1 All buildings depending upon the occupancy use and height shall be protected by fire extinguishers, hose reels, wet riser, down-comer, yard hydrants, automatic sprinkler installation, deluge system, high/medium velocity water spray, foam, water mist systems, gaseous or dry powder system, manual/automatic fire alarm system, etc, in accordance with the provisions of various clauses given below, as applicable:
a) These fire extinguishing equipment and their installation shall be in accordance with accepted standards [4(17)]. The extinguishers shall be mounted at a convenient height to enable its quick access and efficient use by all in the event of a fire incidence. The requirements of fire extinguishers/yard

etc, shall be as specified in Table 7. The requirements regarding size of mains/risers shall be as given in Table 8. The typical arrangements of down-comer and wet riser installations are shown in Fig. 13. The wet riser shall be designed for zonal distribution ensuring that unduly high pressures are not developed in risers and hose-pipes.

b) First-aid firefighting appliances shall be provided and installed in accordance with good practice [4(18)]. The firefighting equipment and accessories to be installed in buildings for use in firefighting shall also be in accordance with the accepted standard [4(17)] and shall be maintained periodically so as to ensure their perfect serviceability at all times.

c) Valves in fixed firefighting installations shall have supervisory switch with its signalling to fire alarm panel or to have chain(s), pad lock(s), label and tamper-proof security tag(s) with serial number to prevent tampering/unauthorized operation. These valves shall be kept in their intended open position.

d) In addition to wet riser or down-comer, first-aid hose reels shall be installed in buildings (where required under Table 7) on all the floors, in accordance with accepted standard [4(19)]. The first-aid hose reel shall be connected directly to the riser/down-comer main and diameter of the hose reel shall not be less than 19 mm.

e) Wet risers shall be interconnected at terrace level to form a ring and cut-off shall be provided for each connection to enable repair/ maintenance without affecting rest of the system.

f) Pressure at the hydraulically remote hydrant and at the highest hydrant shall not be less than 3.5 bar. The pressure at the hydrants shall however not exceed 7.0 bar, considering the safety of operators. It may be planned to provide orifice plates for landing valves to control pressure to desired limit especially at lower levels; this could also be achieved through other suitable means of pressure reducing devices such as pressure controlled hydrant valves.

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Static water storage tanks as per clause – 5.1.2.1

30. a) firefighting shall always be available in the form of underground/terrace level static storage tank with capacity specified for each building with arrangements or replenishment.

b) Water for the hydrant services shall be stored in an easily accessible surface/underground lined reservoir or above ground tanks of steel, concrete or masonry. The effective capacity of the reservoir above the top of the pump casing (flooded suction) for various types of occupancies shall be as indicated in Table 7.

Firefighting pump house as per clause 5.1.2.2 The requirements shall be as given below:

31. a) It is preferable to install the pump house at ground level. Pump house shall be situated so as to be directly accessible from the surrounding ground level.

Automatic Sprinkler Installation as per clause – 5.1.3 The requirements shall be as given below:

32. a) Automatic sprinklers shall be installed wherever required in terms of Table 7 throughout the building in accordance with good practice [4(20)].

b) If selective sprinklering is adopted, there is a real danger of a fire starting in one of the unsprinklered area gathering momentum spreading to other areas and reaching the sprinklered areas as a fully developed fire. In such an event, the sprinklers can be rendered useless or ineffective.

Compartmentation as per clause - 4.5

43. 4.5.2 All floors shall be compartmented/zoned with area of each compartment being not more than 750 m². The maximum size of the compartment shall be as follows, in case of sprinklered basement/building:

Sl. No	Use
1	Basement car parking
6	Business buildings

13) In view of the above and as per recommendations of the multistoried building inspection Committee, the No Objection Certificate for Occupancy is issued to Multi Storied Building of **Hi-Tech Scholars Residential School, C/o Sri.P Harigopal, Survey No.268, Ragahvendra nagar, Athvelly(V), Medchal(M), Medchal-Malkajgiri District, Telangana**, with a height of 10.30 Meters for **EDUCATIONAL B-2 All others/training institutions** Occupancy subject to the following conditions, which also include the responsibilities of the Builder, Management Body of the building, Occupants and fire and security personnel.

Sl No	Builder and Management Body	Occupant	Management Body and fire and security personnel
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	<p>arrangements shall be maintained in good condition as seen during inspection.</p> <p>-b) Do's and Don'ts in case of fire shall be prominently displayed in entire building</p>	All the escape/exit roots shall not be kept locked/blocked or encroached	All the occupants must know the correct method of operation of the fire fighting systems installed.
2	Any loss of life or property due to non-functioning of fire safety measures and other installations shall be the responsibility of the management.	All occupants shall be trained to operate the fire safety equipment during emergency.	Mock drills should be conducted once in 3 months for initial two years. Thereafter, once in every 6 months.
3	Addition / alteration, if any in the building may be verified by building authority.	Mock drills should be conducted once in 3 months for initial two years. Thereafter, once in every 6 months.	All security personnel shall be trained to operate the fire safety equipment during emergency and guiding the occupants in safe evacuation. Call the fire Brigade by dialing 101.
4	This No objection Certificate for occupancy is valid for five year from the date of issue of this letter.	Raise the alarm if the fire cannot be controlled, evacuate the area completely at once from the nearest safe exit.	Attack the fire using available fire equipment only if you feel capable of controlling it. If not, take all steps to isolate the area by closing doors and windows.

This No Objection Certificate for Occupancy is valid for Five years from the date of issue of this letter. It is the responsibility of the builder to apply for renewal NOC, duly remitting the user charges as per G.O. Ms. No. 71, Home (Prison - A) Department, dated 01-04-2010, two months before expiry of this No Objection Certificate.

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