



**ODISHA FIRE SERVICE
FIRE SAFETY RECOMMENDATION**

FORM-II

[Under Rule-12 (5)]



RECOMMENDATION No:	RECOMM1204130052022000695	APPLICATION No:	FSR1204130052022000778
Date of Issue:	14-07-2022	Date of Receipt of Application:	08-07-2022

1.	Name & Address of the proposed Building/Premises:	Proposed S+5 storied M.I.G Category Residential Apartment building for Sky Tech Infra Projects Pvt. Ltd, Mouza-Rahūhathpurjali, Patia, Bhubaneswar.
2.	Name and Address of the Applicant(s):	Sri Rupak Panda, Managing Director, M/s Sky Tech Infra Projects Pvt. Ltd,
3.	Proposed Occupancy (Type of Building):	The proposed S+5 storied Residential Apartment building coming under "Residential Building" as per Odisha Development Authorities (Planning and Building Standards) Rules, 2020 and Residential Apartment (Group-A, Sub-Division A-4) as per NBCI-2016.
4.	Area with Plot Number and Khata Number:	Plot Area-1821.74 sqm. Plot No. 1415 & 1416,
5.	Date of inspection:	12-07-2022

6. Recommendation:

The Fire Safety Recommendation for the following building(s) is/are as follows: -

A.	Structural and construction site requirements:	
i.	Details of the building(s) like height, no. of floors, area on each floor, built up area, etc	<p>Floor wise occupancy with area: S+5 storied Residential Apartment:- Stilt floor-857.15 sqm , usage- Parking & service 1st floor- 658.18 sqm, usage- Residential flats. 2nd to 5th floor (Typical)-651.06 sqm each, usage- Residential flats. Total built up area- 4119.57 sqm.</p> <p>Height:- The height of the building as per plan shall be 14.90 mtrs and 17.30 meters from ground level including the height of the ceiling of the stilt floor i.e 2.4 meters, which is exemption as per clause-39 (vi) of ODA (P & BS) Rules, 2020.</p>
ii.	Parking	<p>Provision of stilt floor parking has been proposed in the plan. Provision of parking shall be made in accordance to Rule-37 ODA (P&BS) Rules-2020.The parking space to be provided shall be in addition to the minimum setbacks as required under Regulation-33 of ODA (P&BS) Rules, 2020.</p>
iii.	Access To The Building	<p>As per plan width of abutting Road or Means of Access proposed 9.14 meters. The width of the main entrance gate shall not be less than 06 mtrs. The main gate shall fold back against the compound wall of the premises. If the main entrance gate is built over, the height of the same shall not be less than 05 meters. Provisions for access to the building fulfil the requirement as per Regulation-30 and 31 of ODA (P&BS) Rules, 2020.</p>
iv.	Open spaces (In Mtrs.)	<p>As per the plan, provision of the following setbacks has been proposed: - Front – 03.00 mtrs , Rear – 03.50 mtrs, Left –03.21 mtrs, Right – 03.08 mtrs The setbacks all around the building shall not be less than 03 mtrs each in width. Provision of setbacks proposed in the plan satisfies the requirement as per Regulation-33 of ODA (P&BS) Rules, 2020. The setbacks around the building shall be made hard surfaced capable of taking the mass of fire tender, weighing 45 ton minimum and load bearing capacity certificate from the competent authority shall be obtained to that effect. Compulsory required open space as per ODA (P&BS) Rules, 2020 around the building shall not be used for parking purpose and shall be free from obstruction at all time and the same shall also be made hard surfaced. The said open space including the covering slabs of underground water tank septic tank and recharging pits, if any are proposed to be positioned in the open space must have appropriate load bearing capacity.</p>
v.	Exits (Type, Number, Dimension & Ramp Arrangement)	<p>01 no staircase has been proposed in the plan and continues from stilt to terrace floor. The clear width of the stairway of the staircase shall not be less than 1.25 mtrs. The minimum width of treads without nosing shall be 250 mm. The maximum height of riser shall be 190 mm and shall be limited to 12 risers per flight as per Annexure-III, clause-4.4.2.4.3.2 of ODA (P&BS) Rules, 2020. The Travel Distance should be less than 20 mtrs in each floor. Provision of exits proposed in the building satisfies the requirement as per Regulations 72, ODA (P&BS) Rules, 2020. Exit doorways shall not be less than 01 meters in width and not less than 02 meters in height. As per plan the staircase is proposed to be constructed with external wall. The staircase is required to be pressurized or provision of natural ventilation be made at each floor landing. The natural ventilation requirement of the staircase shall be achieved through opening at each landing of an area 0.5 m² in the external wall. Mechanism for pressurizing the staircase shall operate automatically with the fire alarm. External exit door of staircase enclosure at ground level shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a drought lobby. The exit sign with arrow indicating the way to the escape route shall be provided at all conspicuous places and shall be illuminated by electric light connected to corridor circuits. All landings of floor shall have floor indication boards indicating the number of floor. In addition to above all other provisions for exits/doorways/stairways/corridor shall be made as</p>

		per Clause 4.2 to 4.6.2 of NBCI-2016 and Annexure-III of ODA (P&BS) Rules, 2020.
vi.	Lifts	<p>02 nos lifts have been proposed in the plan. Both are continues from stilt to 5th floor which satisfies the requirement as per Regulations-42 of ODA (P&BS) Rules, 2020.</p> <p>The capacity of lift car has not been mentioned in the plan. The capacities of lift shall not be less than 08 passenger's i.e 544 kg and at least 01 lift in every building block shall be a stretcher lift. Grounding switch at ground floor level shall be provided. Lift car door shall have a fire resistance rating of 01 hrs. Collapsible gates shall not be permitted for lifts and shall have solid doors with fire resistance of at least 01 hrs. The lift wells shall be pressurized. A sign shall be posted and maintained on every floor at or near the lift indicating floor plan of each floor showing the locations of the stairways.</p> <p>In addition to above, other provisions of lift shall comply to the requirements as specified in 'Building Services, Section 5 Installation of Lifts, Escalators and Moving Walks, Sub-Section 5 (A) Lifts of Part-8 of National Building Code of India, 2016 and Regulation-42,73 (5), Annexure-III & Annexure-IX(3) of ODA (P&BS) Rules, 2020.</p>
vii.	Electrical Service	<p>A stand-by electric generator shall be installed to supply power to staircase and corridor lighting circuits, fire lifts, the stand-by fire pumps, pressurization fans and blowers, smoke extraction and damper system in case of failure of normal electric supply. The staircase and corridor lighting shall be on separate service and shall be independently connected so as it could be operated by one switch installation on the ground floor, easily accessible to firefighting staff at any time irrespective of the position of the individuate control of the light points, if any. Staircase and corridor lighting shall also be connected to alternate supply from parallel high-tension supply or to the supply from the stand-by generator. All wires and other accessories used for emergency light shall have fire retardant property.</p> <p>The electric distribution cables or wiring shall be laid in separate duct which shall be sealed at every floor with non-combustible materials having the same fire resistance as that of the duct. Low and medium voltage wiring running in shaft and in false ceiling shall run in separate conduits. Water mains, telephone cables, intercom cables, gas pipes or any other service line shall not be laid in the duct for electric cables.</p> <p>Transformer if housed in the building below the ground level shall be separated from the other portion of premises by Fire Resisting Walls of 4 hours rating.</p> <p>Electrical Installations in the building shall comply to the provisions given in Clause 3.4.6 to 3.4.7.4 of part-4 NBCI-2016 and Annexure-IV of Odisha Development Authority (Planning and Building Standards) Regulations,2020.</p> <p>Provision for lightning protection shall be made in the proposed building as per IS/IEC 62305-4:2010.</p>
viii.	Building Services	
	Air Conditioning	If Provided, Air Conditioning system in the building shall comply to the provisions given in Clause 3.4.8 to 3.4.8.4.2 of part-4 NBCI-2016 and Annexure- IV of Odisha Development Authority (Planning and Building Standards) Regulations,2020.
	Gas supply	If Gas pipe line provided, construction and provision of fire safety measures and firefighting measures shall be as per relevant BIS.
	Others	<p>Construction :- The minimum fire resistance ratings of structural and non-structural Elements (minute) shall be as given in Table-1 of NBCI-2016. The false ceiling, including all fixtures used for its suspension shall be of non-combustible material and shall provide adequate fire resistant to the ceiling in order to prevent spread of fire across ceiling. The structural safety design and construction of the building shall be done as per Clause-3.3 & 3.4 of NBCI-2016 and Odisha Development Authorities (Planning and Building Standards) Rules, 2020.</p> <p>Lightning Protection:- Provision for lightning protection shall be made in the proposed building as per NBCI-2016 and in corporate to relevant BIS specifications. Routing down of conductors (Insulated or Un-Insulated) of lightning protection shall not be made through electrical or other service shafts.</p> <p>Service Ducts and Shafts :- Openings in walls or floors which are necessary to be provided to allow passages of all building services like cables, electrical wirings, telephone cables, plumbing pipes, etc. shall be protected by enclosure in the form of ducts / shafts and such shaft and inspection doors fitted thereto</p>

		shall have fire resistance rating not less than as specified in Clause 3.4.5.4 of NBCI-2016 and Odisha Development Authorities (Planning and Building Standards) Rules, 2020.
	Fire Command Centre	There shall be a Fire Command Centre on entrance floor of the building having direct access. The Fire Command Centre shall have the main fire alarm panel with communication system (suitable public-address system). All controls and monitoring of fire alarm systems, pressurization systems, smoke management systems shall happen from this room. Fire Command Centre shall have provisions in accordance with Clause-3.4.12 of Part-4, NBCI-2016.
B.	Fixed Fire Fighting Installations :	
i.	Fire Extinguisher	Provision of fire extinguishers shall be made in entire building and shall be in accordance to BIS: 2190:2010.
ii.	First- Aid Hose Reel	The distribution of first-aid hose reel installation in the proposed building shall be so situated as not to be farther than 30 mtrs. From any point in the area covered and first-aid hose reels shall not be more than 50 mtrs. apart in horizontal. Installation of the First-Aid hose reel shall be in accordance to BIS 884:1985 & BIS 3844:1989.
iii.	Down Comer	Down Comer shall be provided in each floor of the building. The distribution of down comer installation in the proposed building shall be so situated as not to be farther than 30 meters from any point in the area covered and shall not be more than 50 meters apart in horizontal. At each floor landing there shall be provision of hose box to accommodate 02 Nos. RFL Delivery Hoses of 15 meters length each of 63 mm dia and 01 no. branch pipe. Installation of down comer shall be in accordance to BIS 3844:1989.
iv.	Manually Operated Electronic Fire Alarm System	Manually Operated fire alarm system at conspicuous places in each floor of the building shall be provided Manually operated electric fire alarm system shall also include talk-back and Public Address System and shall be installation in accordance to IS/ISO 7240-11:2011.
v.	Terrace Tank	Terrace Tank of 25,000 ltrs. Capacity shall be provided at the top of the building for fire fighting purpose. It should be ensured that water in the tank is not utilized for any other purpose other than fire fighting.
vi.	Pump At Terrace Tank Level With Minimum Pressure Of 3.5 Kg/Cm2	Provision of terrace pump of 900 LPM. Capacity having connectivity to terrace tank and down comer pipes shall be made in the building.
C.	Opinion :	<p>The site is suitable for construction of above proposed structure subject to condition that the owner/occupier shall provide any additional fire requirements in future if the recommendation is issued by this department.</p> <p>After completion of the construction work including installation of fixed firefighting measures as suggested, the applicant shall be required to apply for Fire Safety Certificate as per Rule 13 (1) of Odisha Fire Prevention and Fire Safety Rules, 2017, along with following documents: -</p> <ol style="list-style-type: none"> The applicant shall produce a certificate to be issued by the person concerned to the effect that all the provisions of Bye-Laws / Regulations of Odisha Development Authority and Recommendations issued from this office have been incorporated in the building. The applicant shall produce a certificate of the Competent Authority concerned to the effect that electrical installations have been done as recommended and as per provisions given in Part-8 "Building Services, Section-2 Electrical and allied installations" of NBCI-2016 and Section-7 of National Electrical Code, 2011. The applicant shall produce a certificate of the agency concerned to the effect that installation of firefighting measures has been done as recommended and as per provisions given in Part-4 of National Building Code of India – 2016 and relevant BIS specifications.



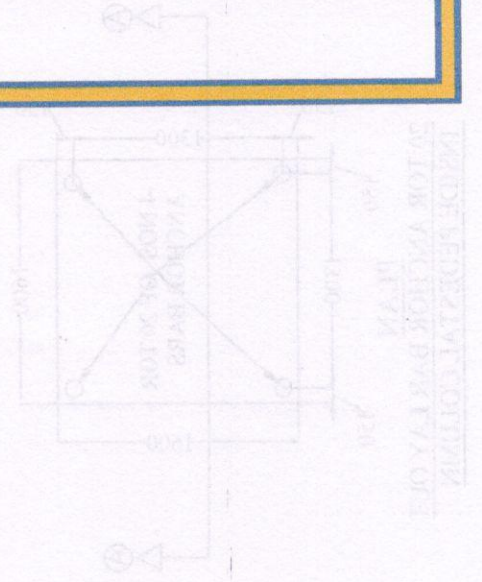
Range Fire Officer, Central
Range-II, Bhubaneswar

NOTE

- (i) It is a digitally signed electronically generated certificate and therefore needs no ink-signed signature.
- (ii) This Certificate is issued as per section 4, 5, & 6 of Information Technology Act 2000 and its subsequent amendments in 2008.
- (iii) For any Query or Verification, Agency / Department / Office may visit <http://agnishamaseva.odisha.gov.in>



(iv) Tampering of this Certificate will attract penal action.



ITEMS	WORK WITH PROVISION OF VOUCHER BOOKS
PROJECT	CONSTRUCTION OF NEW BLDG. TRAKS FOR SERVICES (D.M. ROAD)
APPROVED TO	ENGINEER IN CHARGE, DEPT. OF P.W.D.

REVISIONS
 DATE
 BY
 COMM. DATE

- 1. ALL DIMENSIONS IN BRICKS GRouted
- 2. PROTECTIVE COATINGS TO BE APPLIED TO ALL REINFORCEMENT BARS
- 3. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.
- 4. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.
- 5. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.
- 6. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.
- 7. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.
- 8. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.
- 9. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.
- 10. ALL REINFORCEMENT BARS ARE TO BE OF 12MM DIA.