

BRIHANMUMBAI MUNICIPAL CORPORATION

MUMBAI FIRE BRIGADE

**Office of the Dy. Chief Fire Officer (R-II), Wadala Fire Station, Shaikh Mistry
Dargah road, C.G.S. Colony, Opp. MHADA Colony, Antop Hill, Wadala, Mumbai-
400 037. Telephone No. 24132058 Fax No. 24153027**

Sub: Fire fighting & fire protection requirements for the proposed plans for the redevelopment under Regulation 33(7) of DCPR-2034 i.e. construction of High-rise Residential Building on plot bearing C.S. No. 40/26, Plot No. 48K of Dadar Matunga Estate, scheme No. 31, off Dr. Babasaheb Ambedkar road, F/S ward, Mumbai.

Ref: Online proposal u/No. EB/1041/FS/A-CFO/1/New , dated 20/06/2022 by Mr. Ameet Pawar , Architect of M/s. AakarArchitects & consultants, Mumbai.

**Mr. Ameet Pawar
Architect,
M/s. AakarArchitects & consultants, Mumbai.**

You have uploaded application ,building detail form, proposed plans under redevelopment scheme of Regulation No. 33(7) of DCPR-2034 for the proposed construction of High rise residential building having part basement (-03.50mtrs.) for U.G. water storage tanks, pump room + Ground floor for lift lobby, Electric meter rooms, + girder/service floor + 1st floor to 21st upper residential floors having total height of 69.95mtrs from general ground level to terrace level as shown on plans along with Automated mechanized Pit Puzzle Car Parking system within building line with 04 hours fire resistance walls and having height 07.40 mtrs. & Pit depth -10.85 mtrs. with spiral staircase for pit , as shown on the plans.

➤ **FLOOR WISE USER OF THE BUILDING:-**

Floors	Users	
Basement (-03.50 mtrs.)	U.G. Water Tanks. Pump room	Automated mechanized Pit Puzzle Car Parking system (+07.03 mtrs.) Having pit (-07.10 mtrs.)
Ground floor	Lift lobby, Electrical meter rooms,	
1 st floor to 5 th floor, 7 th floor to 12 th floor, 14 th floor to 21 st floor	02 Nos. of residential flats on each floor	
Service floor in between ground floor & 1 st floor	Girder/Service floor	
6 th floor & 13 th floor	01 No. of residential flat & Refuge area on each floor	
Terrace	L.M.R., O.H.T., Open to sky Terrace	

➤ **DETAILS OF STAIRCASES:-**

Staircase	Width	Type	No. of Staircases
Leading from Basement to top floor Level. (Diverted at ground level)	01.50 mtrs.	Enclosed	01 No.

The proposed staircase is externally located and naturally ventilated to outside air as shown on the plans.

➤ **DETAILS OF LIFT :-**

Lifts Type	Profile	Nos.
Passenger lift	Leading from Ground to Top floor level.	02 Nos.
Fireman evacuation lift	Leading from Ground to Top floor level.	01 No.

One passenger lift will be converted into fire lift as per the norms. The lift lobby at each floor level is directly naturally ventilated to outside air as shown in the plan.

➤ **DETAILS OF CANTILEVER REFUGE AREA:-**

Floor	Refuge area sq. mtrs.		Height mtrs.
	Required	Proposed	
6 th floor	31.06	32.99	23.55
13 th floor	40.02	40.03	43.85

In addition to that terrace of the building will be treated as refuge area. Refuge area beyond 4.25% shall be counted in FSI

- You have shown on the plan that the plot abuts on 09.15 mtrs.wide existing Shankar Abaji Palav Marg on south side,48.78 mtrs. wide Dr.Babasaheb Ambedkar road on the east side & 09 mtrs. wide internal access road on the North side

➤ **DETAILS OF PROPOSED OPEN SPACES:-**

Sides	Open Spaces
North	09.00 mtrs. wide internal access road
South	03.00 mtrs. to 03.79 mtrs. + 09.15 mtrs. wide Shankar Abaji Palav Marg
East	01.50 mtrs to 01.64 mtrs. + 48.15 mtrs. wide Dr. Babasaheb Ambedkar road.
West	01.50 mtrs to 03.13 mtrs.

➤ **The proposal is considered favourably in view of the following facts:-**

- That, you have stated that the proposal falls under Regulation 33(7) of DCPR-2034.
- That, you have shown on the plan that the plot abuts on the plot abuts on 09.15 mtrs.wide existing Shankar Abaji Palav Marg on south side,48.78 mtrs. wide Dr.Babasaheb Ambedkar road on the east side & 09 mtrs. wide internal access road on the North side
- That, you have proposed refuge areas within building line facing to roadside as shown on the plans.
- That, Inbuilt fixed fire-fighting system such as wet riser-cum down comer system, courtyard hydrant system, fire alarm system, automatic smoke/heat detection system, automatic sprinkler system, automatic drencher system, public-address system etc. are also recommended to do the compliance.
- That, you have applied online as per E.O.D.B. procedure, you are also requested to get the plans scrutinized as per DCPR-2034 & get verified all the other requirements pertaining to civil Engineering side including open spaces, corridors,

staircases, height, Floor occupancy etc. of the building from competent authority and if these plans are not approvable then these fire protection and fire-fighting requirements shall be treated as cancelled. Proposal shall be referred back to this department for fresh fire protection and fire-fighting requirements. Also till then further process of issuing I.O.D. & C.C. shall not be permitted by the competent Authority.

In view of above as far as this department is concerned, the fire-fighting & fire-protection requirements, are stipulated below to do the compliance ,for the proposed plans of High rise residential building having part basement (-03.50mtrs.) for U.G. water storage tanks, pump room + Ground floor for lift lobby, Electric meter rooms, + girder/service floor + 1st floor to 21st upper residential floors having total height of 69.95mtrs from general ground level to terrace level as shown on plans along with Automated mechanized Pit Puzzle Car Parking system within building line with 04 hours fire resistance walls and having height 07.40 mtrs. & Pit depth -10.85 mtrs. , with spiral staircase for pit ,as shown on the plans , signed in token of approval, are as follows;

1) ACCESS:-

- a) There shall be no compound wall on the road sides i.e. 09.15 mtrs. wide existing Shankar Abaji Palav Marg on south side,48.78 mtrs. wide Dr. Babasaheb Ambedkar road on the east side & 09 mtrs. wide internal access road on the North side
- b) Courtyard shall be flushed with road levels.
- c) Archways, if any over the entrance gates, shall have height clearance of not less than 6.00 mtrs.

2) COURTYARDS:-

- a) The available courtyards on all the sides of the building shall be paved suitably to bear the load of fire engines weighting up to 48 M. tones with point load of 10 kg/sq cm.
- b) All the courtyards shall be in one plane.
- c) No structure of any type other than permitted shall be constructed in courtyards of the building.

3) STAIRCASE:-

- a) The flight width of staircase 01.50 mtrs. as shown on the plans shall be maintained throughout its length.
- b) The layout of the staircases shall be of enclosed type & externally located throughout their height as shown on the plans.
- c) Externally located staircases adequately ventilated to outside air.
- d) Permanent vent at the top equal to 5% of the cross sectional area of the staircases shall be provided.
- e) Open able sashes or R.C.C. grills with clear opening of not less than 0.5 sq. mtrs. per landing on the external wall of the staircase shall be provided.

➤ **Terrace Staircase Door Manners:**

The terrace door shall be provided in the following manners:

- a) The top half portion of the door shall be provided with louvers.
- b) The latch-lock shall be installed from the terrace side at the height of not more than 1 meter.

- c) The glass front of 6 inch diameter with the breakable glass shall be provided just above the latch lock so as to open the latch in case of an emergency by breaking the glass.
- d) The door shall either be fitted with magnetic lock connected to console & detection system or shall be synchronized with fire detection and alarm system.

4) PROTECTION TO STRUCTURAL STEEL:-

- a) All the structural steel members i.e. columns, beams, etc., shall be protected with the fire resisting materials and methods as stipulated under IS 1942-1960 as application for residential building.
- b) A certificate to that effect that the fire resistance protection has been provided as above shall be furnished from the chartered Structural Engineer at the time of application for occupying the building.

5) ELECTRIC CABLE DUCT & ELECTRIC METER ROOM/PANEL :-

- a) Electrical cable shall be of concealed type and shall not pass through staircase enclosure.
- b) Electric cable duct shall be exclusively used for electric cables & should not open in staircase enclosure.
- c) Electric cable duct shall be sealed at each floor level with non-combustible materials such as vermiculite concrete. No storage of any kind shall be done in electric shaft.
- d) Inspection doors for duct shall have two hours fire resistance. "Form-A" for the installation of F.R.D. from Govt. Approved Licensed agency shall be produced at the time of obtaining compliance certificate.
- e) Electric wiring/ cable shall be non-toxic, non-flammable, low smoke hazard having copper core / fire resistance for the entire building with provision of E.L.C.B. / M.C.B.
- f) Electric meter room/panel shall be provided at location marked on the plans with electric emergency switch at the ground floor level. It shall be adequately ventilated & easily accessible.
- g) Low & medium voltage wiring running in shaft & in false ceiling should run in separate conduits.
- h) Water mains, telephone lines, intercom lines, gas pipes or any other service line should not be laid in the duct for electrical cables; use of bus bar / solid rising mains instead of cables is preferred.
- i) Separate circuits for firefighting pumps, lifts, staircases & corridor lighting shall be provided directly from the main switch gear panel and these circuits shall be laid in separate conduit pipes, so that fuse in one circuit will not affect the others. Such circuits shall be protected at origin by an automatic circuit breaker with its no-volt coil removed.
- j) Master switches controlling essential service circuits shall be clearly labelled & provide in the lobby for emergency operations.
- k) Automatic Smoke detection system incorporate with response indicator shall be installed in electric duct on each floor & in the electric meter room.
- l) All the electrical installations, electrical wirings etc. shall be as per prevailing electricity Act & Rule. The certificate to that effect from the Govt. Approved Licensed electrician shall be produced at the time of obtaining compliance certificate.

6) BASEMENT:- (-03.50 mtrs.)

- a) Basement shall be adequately ventilated. Vents with cross, sectional area (Aggregate) not less than 2.5 percent of the floor area spread evenly around the perimeter of the basement shall be provided in the form of grills or breakable stall boards lights or pavement lights or by way of shafts. Alternatively, a system of air inlets shall be provided at basement floor level and smoke outlets at basement ceiling level. Inlets and outlets may be terminated at ground level with stall boards or pavement lights as before but ducts to convey fresh air to the basement floor level shall have to be laid. Stall boards and pavement lights should be in position easily accessible to the fire Brigade personal and rescue teams and clearly marked 'SMOKE OUTLET' or 'AIR INLET' with an indication of area served at or near the opening.
- b) The basement shall be used for designated purpose only as shown in the plan.
- c) The basement shall be provided with natural as well as mechanical ventilations through the ventilators, open cut outs as shown in the plan.
- d) The staircase of the basement shall be of enclosed type and entry to basement areas shall be through two hours fire resistance self-closing door provided in the enclosed wall of the staircase.
- e) Suitable signage's shall be provided in the basement showing exit direction, way to exits etc.
- f) Smoke check lobby, Staircases, common passages & escape routes of the entire building shall be painted with fire retardant paint.
- g) One Dry Chemical Powder fire extinguisher ABC type of 06 kgs. capacity each shall be kept for every 100 sq. mtrs. area in basement.
- h) Staircase and lift lobby shall have illuminated by inverter operated exits signs with IP 54 enclosure. Luminance of the signages shall be such that they are visible from a distance of 12 to 16 meters

7) LIFT:-

A. PASSANGERS LIFT:-

- a) Walls enclosing lift shaft shall have a fire resistance of not less than two hours.
- b) Shafts shall have permanent vent of not less than 0.2 Sq.mtr. in clear area immediately under the machine room.
- c) Landing doors and lift car doors of the lift shall be of steel shuttered with fire resistance of one hour. No collapsible shutter shall be permitted.
- d) One of the lift from each lift bank shall be converted into fire lift and shall be as per specifications laid down under the regulations a toggle switch shall be provided to this lift for the use of Firemen.
- e) Threshold of non-combustible material shall be provided at the entrance of each landing door

B. FIRE LIFT:-

- a) To enable fire services personnel to reach the upper floors with the minimum delay one fire lift shall be provided and shall be available for the exclusive use of the firemen in an emergency.
- b) The lift shall have a floor area of not less than 1.4 sq.mtrs It shall have loading capacity of not less than 545 kg (08 persons lift) with automatic closing doors of minimum 0.8 m. width.
- c) The electric supply shall be on a separate service from electric supply mains in a building and the cables run in a route safe from fire that is within the lift shaft Light & Fans in the elevators having wooden panelling or sheet steel construction shall be operated on 24 volt supply.

- d) Fire lift should be provided with a ceiling hatch for use in case for emergency so that when the car gets stuck up, it shall be easily openable.
- e) In case of failure normal electric supply, it shall automatically changeover to alternate supply. For apartment, this changeover of supply could be done through manually operated changeover switch. Alternatively, the lift shall be so wired that in case of power failure it comes down at the ground level and comes to stand-still with door open.
- f) The operation of fire lift should be by a simple toggle or two-button switch situated in glass-fronted box adjacent to the lift at the entrance level. When the switch is on, landing call points will become inoperative and the lift will be on car control only or on a priority control device. When the switch is off, the lift will return to normal working. Then this lift can be used by the occupants in normal times.
- g) The words "Fire lift" shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.
- h) The speed of the fire lift shall be such that it can reach the top floor from ground level with in one minute.
- i) Fire lift shall be constructed as per prevailing standard.

C. FIREMAN EVACUATION LIFT:-

- 8) Capacity of Fireman Evacuation Lift shall be of 845 to 1000 kgs. /8 to 15 persons and it shall be terminated on ground floor or podium/parking floor where facility of assembly or evacuation is available in case of emergency.
- 9) Fireman Evacuation Lift shall be housed in a separate core having smoke check lobby with opening on each floor and shall be attached with one of the staircases and required access to the staircase on each landing through fire resistance of two hours rating. Alternatively, firemen evacuation lift shall be provided on every mid-landing of one of the enclosed staircases of the building and the staircase shall be protected with smoke check lobby by means of fire resistance door/ fire curtain or fire resistance glass having two hours rating.
- 10) All the requirements pertaining to civil and electrical aspects mentioned in NBC for Fire Lift shall be applicable for Fireman Evacuation Lift.
- 11) Fireman Evacuation Lift car doors and landing doors shall have two hours fire resistance and shall have provision of glass vision for both doors of minimum 1 ft. X 2 ft. And the glass shall also have two hours fire resistance.
- 12) Fireman Evacuation Lift shall have emergency operation switch which will be only operated by fire brigade personnel. On actuation of the switch the Fireman Evacuation Lift will operate from inside and the lift car door shall not open automatically but shall have control from inside to open it. The emergency operation switch shall also be provided in the ground floor lobby.
- 13) The backup electric supply shall be through UPS for at least 30 min and it shall be supported online by another regular and alternate emergency supply.
- 14) Two-way communication systems shall be provided in Fireman Evacuation Lift car as well as at every landing level including lobby at ground floor.
- 15) All the electrical cable shall be fire retardant with low smoke hazard complying relevant BIS standards.
- 16) Fireman Evacuation Lift car shall be of non-combustible material including interior having minimum two hours resistance.
- 17) Lift maintenance shall be carried out only by Lift Manufacturing or Installation Company.

- 18) Fireman Evacuation Lift and the staircase attached to it shall be clearly marked mentioning FIRE ESCAPE LIFT/STAIRCASE at each landing door at each floor level.
- 19) The smoke check lobby with evacuation lift shall have positive level difference of minimum 75 mm with respect to staircase landing or mid landing level to avoid ingress of water in fireman lift shaft.

20) **AUTOMATED MECHANISED PUZZLE CAR PARKING:**

- a) All the structural steel members of the mechanized car parking block i.e. columns, beams, external cladding with coated steel sheets etc. shall be protected with the fire resisting / retardant materials and methods as stipulated under relevant I.S. specification. A certificate to that effect that the fire resistance protection has been provided as above shall be furnished from the chartered Structural Engineer.
- b) The cars shall be separated by perfect partition of 4.50 mm thick steel pallets between two cars to prevent spread of fire from one level to next level.
- c) The mechanized car-parking block has door at the bottom and covered opening at the top to create natural drafts, to prevent spreading of fire.
- d) The electrical cables used internally shall be fire retardant, and heat resistant of 105 degree centigrade.
- e) Emergency Stop switch shall be installed inside the auto parking system, at the top of the tower, near the driving unit, outside the tower on operation panel & on the main control panel for activation in case of any emergency, for the power cut off to the main motor and all operations to stop.
- f) Stopper shall be installed on each pallet for the maximum position to which the car can be driven onto the pallet.
- g) Blue and Red display lamps indicating whether system is ready to accept the car shall be installed at the entry point of the car. When the red lamp is on, car should not enter into the tower.
- h) Car parking shall be protected with Early Response type Automatic sprinkler system in the form of water spray projector system conforming to the standards laid down by T.A.C. and relevant I.S. specification shall be provided with sprinkler head at each level below each pallet on engine side as well as rear side.
- i) Wet riser of internal dia. of 15cms. G.I. 'C' class pipe shall be provided with spiral staircase with single hydrant outlet and connected to the fire service outlet on the external face of the car parking tower directly fronting the courtyards shall be provided to connect the mobile pump of the fire service to the Wet riser.
- j) Drencher system on the top of car parking area shall be provided on the periphery and shall be interfaced with fire detection / alarm system.
- k) Fire detectors (Heat) shall be installed below each pallet to detect any increased temperature beyond 80 degrees centigrade Control Panel on the ground floor.
- l) The car engine shall be shut off at ground level before parking at higher level.
- m) Only trained operator certified by company installing car towers shall operate car parking.

21) **STAIRCASE AND CORRIDOR LIGHTINGS:**

- a) The staircase and corridor lighting shall be on separate circuits and shall be independently connected so that they could be operated by one switch

installation on the ground floor easily accessible to fire fighting staff at any time irrespective of the position of the individual control of the light points, if any.

- b) Staircase and corridor lighting shall also be connected to alternate supply.
- c) Double throw switches should be installed to ensure that lighting in the staircase and the corridor does not get connected to two sources of supply simultaneously. A double throw switch shall be installed in the service room to terminate the stand-by-supply.
- d) Emergency lights shall be provided in the staircases/corridors.

22) FLAT ENTRANCE KITCHEN DOORS & EXIT/ ENTRANCE STAIRCASE:

- a) Entrance of each occupancy, flat entrance and kitchen doors shall be of solid core having fire resistance of not less than one hour (solid wood of 45mm thickness.)
- b) The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors as per N.B.C. provisions.
- c) "Form-A" for the installation of F.R.D. from Govt. Approved Licensed agency shall be produced at the time of obtaining compliance certificate.

23) REFUGE AREA MID-LANDING LEVEL:-

Refuge areas proposed within building line on the 6th & 13th floor shall confirm the following:

- **Manner of refuge area**
 - a. The refuge area shall be located as shown in the plan.
 - b. The refuge area shall be provided with railing / parapet of 1.20 mtrs.
 - c. The refuge area shall have a door which 'shall be painted or fixed with a sign in luminous paint mentioning "REFUGE AREA"
 - d. The lift/s shall not be permitted to open directly into the refuge areas.
 - e. The refuge area provided within building line shall be accessible from common passage/ staircase.
- **Use of refuge area:**
 - a. The refuge area shall be earmarked exclusively for the use of occupants as temporary shelter and for the use of Fire Brigade Department or any other organization dealing with fire or other emergencies when occur in the building and also for exercises/drills if conducted by the Fire Brigade Department.
 - b. The refuge areas shall not be allowed to be used for any other purpose and it shall be the responsibility of the owner/occupier to maintain the same clean and free of encumbrances and encroachments at all times.
- **Terrace floor as a refuge floor:**
 - a. The necessary facilities such as emergency lighting, drinking water etc. shall be provided.
 - b. The access door/s from the enclosed staircase/s to the terrace floor shall have louvers at top half portion of the door. The entrance doors to the terrace shall be painted or fixed with sign painted in luminous paint mentioning "REFUGE AREA".
 - c. Excess refuge area beyond 4.25 % shall be counted in FSI.

24) ELEVATION FEATURES:-

- a) The elevation treatment proposed shall be of non-combustible materials and it should not obstruct fire-fighting activities.
- b) Elevation features of the building shall be as per requirements stated in circular No.- C- 10- vide No. CHE/DP/GEN/110 -2019-2020 dated 30/01/2020.

- c) Supporting system and all framework used for peripheral cladding should be painted with fire retardant paint.
- d) The dead wall portion of the façade, shall be of non-combustible material.
- e) Parapet wall for the proposed connecting terrace portion shall not exceed than 01.50 mtrs. in height.

25) FALSE CEILING (IF PROVIDED):-

False ceiling if provided in the building shall be of non-combustible material. Similarly the suspenders of the false ceiling shall be of non-combustible material.

26) MATERIALS FOR INTERIOR DECORATION / FURNISHING:-

The material which are combustible in the nature and may spread toxic fumes / gases should not be used for interior decoration / furnishing, etc.

27) FIRE FIGHTING REQUIREMENTS:-

A. Under ground water storage tank:

An underground water storage tank of 2,00,000 litres capacity shall be provided at location marked on the plan, as per the design specified in the rules with baffle wall and fire brigade collecting breaching. The layout of which shall be got approved from H.E.'s department prior to erection.

B. Overhead terrace water storage tank:

A tank of 30,000 litres capacity shall be provided on staircase shaft at the terrace level, the layout of which shall be got approved from H. E.'s departments prior to erection. The tank shall be connected to wet risers through a booster pump through a non-return valve gate valve.

C. Wet riser cum down comer:

Wet riser cum down comer of internal dia. of 15 cms. Of G.I. 'C' Class pipe shall be provided with double hydrant outlet & hose reel at each floor in such a way as not to reduce the width of the common corridor. Pressure reducing discs or orifices shall be provided at lower level, so as not to exceed the pressure of 5.5kgs. Per sq. cms.

D. Fire service inlet:

- a) A fire service inlet on the external face of the building near the tank directly fronting the courtyards shall be provide to connect the mobile pump of the fire service independently to the wet riser , sprinkler system.
- b) Breaching connection inlet shall be provided to refill U.G. tank.
- c) Operating switches of fire pumps shall be also provided in glass fronted boxes at ground floor.

E. Automatic sprinkler system:

- a) Automatic sprinkler system shall be provided in entire building including each habitable area in each flat, society office, fitness centre, lift lobby & common corridor at each floor level etc.
- b) Early Response type Automatic sprinkler system in the form of water spray projector system conforming to the standards laid down by T.A.C. and relevant I.S. specification shall be provided with sprinkler head at each level below each pallet on engine side as well as rear side in stacked & automated puzzle car parking.

- c) Automatic sprinkler system shall be installed as per the standards laid down by N.B.C. or relevant IS specifications.

F. Fire pump, booster pump, sprinkler pump and jockey pump:

- a) Wet-riser shall be connected to a fire pump at ground level U.G. Tank of capacity 2400 litres/min. capable of giving a pressure of not less than 3.2 kgs / sq. cms.at the top most hydrant outlet along with jockey pump of suitable size.
- b) Booster pump of 900 litres / min capacity giving a pressure of not less than 3.2 kgs./sq.cms.at the top most hydrant out let of the wet riser shall be provided at the terrace level connected to O.H. tank.
- c) Sprinkler pump of suitable capacity along with jockey pump shall be provided for automatic sprinkler system.
- d) Electric supply (normal) to these pumps shall be independent circuit.
- e) Operating switches of booster pumps shall be also provided in glass fronted boxes in lift lobby at ground floor
- f) The fire pumps provided shall be surface mounted type or vertical turbine mounted type and not submersible type.

G. Automatic Drencher System:

Automatic drencher system shall be provided on the periphery at external wall of the top of Automated puzzle car parking areas & shall be connected to the main Sprinkler pump. The automatic drencher system shall be installed as per the standard laid down by T.A.C. & relevant I.S. specifications.

H. External hydrants:

Courtyard hydrants shall be provided within confines of the wet riser for every 30 meters distance around entire building. Hose boxes each with two hoses of length 50 feet RRL standard size and branch shall be kept and equally distributed in courtyard area.

I. Control Panel boards of fire fighting system:

Control Panel boards for Wet riser system; Automatic sprinkler system etc. shall be installed on ground floor at easily accessible location.

J. Alternate source of power supply or D.G. set:

Alternate source of L V/ H C. supply from a separate electric substation Or D. G. Set with appropriate change over switch shall be provided for fire pumps, sprinkler pump booster pump, jockey pump, staircase and corridor lighting circuits, manual fire alarm system & fire detection system. It shall be housed in a separate cabin.

K. Fire alarm system:-

The building shall be provided with manual fire alarm system with main control panel at ground level and pill box and hooters at each upper floor level. The layout of fire alarm system shall be in accordance with I.S. specification.

L. Automatic smoke/Heat detection system:

Appropriately Automatic smoke/Heat detection system shall be provided in fitness centre, society office, in lift lobby/ common corridor at each floor level, in each lift machine room, electric meter box, basement, Automated puzzle car

parking area. The same should be connected to main console panel on ground floor level, as per IS specification.

M. Portable fire extinguishers:

- a) Dry Chemical Power (ABC type) fire extinguishers of, 06 Kgs. Capacity having ISI certification mark and two bucket filled with dry, clean sand shall be kept in Electric meter as well as Lift Machine Room etc.
- b) Dry Chemical Power (ABC type) fire extinguishers of, 06 Kgs. Capacity having ISI certification mark shall be kept on each floor level, refuge area , society office , fitness centre, car parking area floors at prominent places
- c) AVD (Aqueous Vermiculite Dispersion agent) Trolley mounted type fire extinguisher of 25 litres capacity shall be kept near automated mechanized car parking area.

N. Hoses & Hose Boxes :

One Hose Box with two hoses of 15mts length of 63mm dia. along with branch shall be provided at each courtyard hydrant at ground & on each floor at easily accessible place.

O. Public Address System:

The entire building shall be provided with the public address system in common / areas as per the with main control operator at console panel at ground floor reception area.

P. SIGNAGES:

Self-glowing /fluorescent exit signs in green colour shall be provided showing the means of escape for entire building.

28) FIRE DRILLS / EVACUATION DRILLS:

Fire Drills and evacuation drills shall be conducted regularly in consultation with Mumbai Fire Brigade and log of the same shall be maintained.

29) TRAINED SECURITY GAURDS:

Trained security/fire supervisor along with trained staff having basic knowledge of fire-fighting & fix fire-fighting installation shall be provided/posted in the building. They will be responsible for the following;

- a) Maintenance of all the first aid firefighting equipment's, fixed installations & other firefighting equipment's/appliance in good working condition at all times.
- b) Imparting training to the occupants of the building in the use of fire fighting equipment provided on the premises & kept them informed about the fire & other emergency evacuation procedures.
- c) To liaise with the City Fire Brigade on regular & continual basis.

➤ **Details of scrutiny fee & Fire Service fee as mentioned below:-**

A. Scrutiny Fees:

- a) You have certified vide letter dated 30/06/2022,that gross built up area is 3745.00 sq. mtrs. and paid scrutiny fees of Rs.4,10,000/-vide, SAP Receipt No. 1822220/21/22,SAP No.1004348352, dated 03/06/2022.

B. Fire Service Fees:

- a) You have certified vide letter dated 30/06/2022 that gross built up area of the said High rise Residential building as 3745.00 sq. mtrs. and the Height

of the building as 69.95 mtrs. & as per schedule II of section 11(1) of Maharashtra fire prevention & life safety measure act 2006, has paid "Fire Service Fee" of Rs. 1,00,000 /- vide SAP Receipt No. 1588833/34/35, SAP Doc No. 1004294996 dated 09/06/2022.

However, you are requested to verify the gross built-up area and inform this department, if it is more for the purpose of levying additional scrutiny fees, if required.

The Plans approved along with the requirement letter issued for compliance, are without prejudice to legal matters pending in court of law, if any and from Fire risk/Fire safety point of view only. Approval of these plans does not mean in any way of allowing construction of the building. It is the Architects/Developer's responsibility to take necessary prior approval from all concerned authorities & others for the proposed construction of the building.

Note:-

- a) The fire-fighting installation shall be carried out by licensed approved agency.
- b) Schematic Drawings certified by Govt. Approved Licensed agency of the Fixed Fire Fighting installations shall be submitted to CFO department at the time of obtaining compliance remarks
- c) This approval is issued only from Fire Protection & Fire-Fighting requirements point of view and shall not be treated as authorized/legal document. Any authorized or legal matter shall be cleared by owner/ occupier/ developer/ architects etc. It is issued for instant proposal only and shall not be used as precedent for other proposals.
- d) If any matter in this case, violets D.C.P.R.- 2034 then this proposal shall be referred back to this department for issuing fresh remarks.
- e) The width of abutting road & open spaces are mentioned in plans as submitted by the Architect/ License Surveyor attached herewith and these parameters shall be certified by the Architect/ License Surveyor. Same shall be complied before submission for obtaining the compliance to this department.
- f) These Fire protection & Fire Fighting requirements stipulated for compliance for the instant online proposal uploaded as per E.O.D.B. and is valid subject to necessary approvals for the applicable concessions from all the competent authorities.

**Scrutinized & Prepared by
D.F.O. D.S. Patil**

**Approved By
C.F.O (i/c) S.Y. Manjrekar**

**Copy to
E.E.B.P.(City)**