

Office of the Chief Fire Officer,
MUMBAI FIRE BRIGADE,
4th Ward Central Office,
Municipal Corporation of Gr. Mumbai,
10, S. G. Road, Haldiwadi Marg,
Byculla, MUMBAI-400 008.

Case No. : 11/2/05

Case No. : FRM/S/504/726
Date : 11/2/05
CFO

Sub : Proposed high rise commercial sale building at Pocket - 4, MIDC, Marol, Andheri (east), Mumbai - 400093.

Ref : Letter dated 02.12.2004 from M/s. Citygold Management Services Pvt. Ltd., Architects, Mumbai.

M.F.B. no. M/S/726.

CERTIFIED TRUE COPY

E.E.P. (W.S.)

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**CITYGOLD MANAGEMENT SERVICES PVT. LTD.
ARCHITECTURAL DIVISION**

This is a proposal for the construction of high rise commercial building having ground floor and seven upper floors { part 7th floor } with two level basement, with a height of 32.15

The ground floor is proposed to be used for show room and entrance lobby as marked on the plan, while all the upper floors will have offices.

The building has been provided with four staircases, having flight width of 1.5 mtrs., which is externally located and adequately ventilated at location marked on the plan. Similarly the lift lobby and common corridor at each floor level is also directly ventilated to the outside air, as shown in the plan.

Both the level basement is proposed below the building line, as well as extends beyond the building line. Both the level basement is proposed to be used for car parking and other users as marked on the plan. A two-way ramp of 6.87 mtrs. width is proposed for the basement. In addition the basement is accessible through all the four staircases of the building. Natural ventilation to the upper basement is provided through ventilation cut-outs and for lower basement through mechanical ventilation.

The abuts on 27.5 mtrs. Central Road on West side. The open spaces around the building are as under.

East side	-	Varying 6.05 mtrs. to 9.33 mtrs. including ramp for basement.
West side	-	Varying from 6.00 mtrs. to 12.94 mtrs. + Road.
North side	-	More than 9.00 mtrs. including ramp for basement.
South side	-	More than 6.69 mtrs.

In addition two nos. of driveway of 7.20 mts. width and height clearance of 4.40 mtrs. are provided connecting the west side of the building to the east side.

Terrace floor of the building will be treated as refuge area - *Refuge*

In view of the above, as far as this department is concerned, there would be no objection for the construction of proposed high rise commercial building having ground floor and seven upper floors { part 7th floor } with two level basement, as per the details shown on the enclosed plans, signed in token of approval, subject to satisfactory compliance of the following requirements.

1. ACCESS:

Two entrance gates of not less than 4.5 mtrs. shall be provided to the site, at location marked on the plan. Archways, if any, provided shall have height clearance of not less than 4.5 mtrs.

2. COURTYARDS:

- i) The available courtyards including the R.G. upto a distance 6.00 mtrs. shall be paved suitably to bear the load of fire engines weighing upto 45 m. tonnes.
- ii) All the courtyards shall be in one plane.

3. CAR PARKING:

Car parking shall be restricted to at location marked on the plan.

4. BASEMENT:

- i) The basement slab forming part of the courtyards shall be designed suitably to bear the load of fire engines weighing upto 45 m. tonnes.
- ii) Entry from the basement areas through the staircase shall be gained through half an hour fire resistance self closing door of 45 mm. thickness placed in the enclosed walls of the staircase.
- iii) The basement shall be used for car parking only.
- iv) Natural ventilation to the basement shall be provided through ventilation cutouts or mechanical ventilation.

5. STAIRCASES:

- i) The layout of the staircases shall be of enclosed type throughout its height and shall be approached at each floor levels through half an hour fire resistance self closing door of 45 mm. thickness. Flight width of each staircase shall not be less than 1.5 mtrs.
- ii) Permanent vent at the top equal to 5% of the cross sectional area of the staircase shall be provided.
- iii) Openable sashes or R.C.C. grills with clear opening of not less than 0.5 sq. mtr. per landing shall be provided.

6. COMMON CORRIDOR / LIFT LOBBY:

The common corridor / lift lobby shall be ventilated directly to outside air as shown in the plan and shall be kept unobstructed at all times.

7. FIRE LIFTS AND OTHER LIFTS:

- i) Walls enclosing lift shafts except capsules lifts shall have a fire resistance of not less than two hours.

11. FIRE FIGHTING REQUIREMENTS :

A. UNDERGROUND WATER STORAGE TANK.

An underground water storage tank of 1,00,000 liters capacity shall be provided at basement at location marked on the plan as per design specified in the rules with baffle wall and fire brigade collecting breaching. The tank shall be provided in such a manner that its manhole shall be available at ground floor level, easily accessible to the fire appliances.

B. OVERHEAD WATER STORAGE TANK.

Another tank of 30,000 liters capacity shall be provided at the terrace level. The design shall be got approved from H.E. 's department prior to erection. The tank shall be connected to the wet riser through a booster pump through a non return valve and gate valve.

C. WET RISER :

Wet riser of internal diameter of 10cms. of G.I. 'c' class pipe shall be provided in duct adjoining two staircases with a single hydrant outlet and hose reel on each floor in such a way as not to reduce the width of the staircase. Pressure reducing discs or orifices shall be provided at lower level so as not to exceed the pressure of 5.5 kgs/sq.cm. A fire service inlet on the static tank directly fronting courtyards shall be provided to connect the mobile pump of the fire service to the wet riser. The wet riser shall be extended upto the basement.

D. AUTOMATIC SPRINKLERS SYSTEM.

Automatic sprinkler system shall be provided in both the level basement as well as in the common corridor / lift lobby at each floor level, as per the standards laid down by TAC or relevant IS specification.

E. FIRE PUMP, BOOSTER PUMP, SPRINKLER PUMP AND JOCKEY PUMP.

- i) Wet riser shall be connected to a fire pump at ground level of capacity of not less than 1800 liters/min. capable of giving pressure of not less than 3.2 kgs/sq.cms. at the top most hydrant.
- ii) Booster pump of capacity 450 liters/min. giving a pressure of not less than 3.2 kgs./sq.cms. at the topmost hydrant outlet of the wet riser shall be provided at the terrace level of each building.
- iii) Sprinkler pump of suitable capacity along with jockey pump shall be provided for automatic sprinkler system.
- iv) Electric supply { normal } to this pumps shall be on independent circuit.

F. EXTERNAL HYDRANTS.

Six external hydrants shall be provided within the confines of the site on the wet riser at location marked on the plans.

- ii} Shafts shall have permanent vents of not less than 0.2 sq. mtrs. in clear area immediately under the machine room.
- iii} Landing doors and lift car doors shall be of steel shuttered with fire resistance of one hour. No collapsible shutter shall be permitted.
- iv} One of the lifts shall be converted into fire lift and shall be as per specifications laid down under the regulations.

8.

ELECTRIC CABLE SHAFTS AND ELECTRIC METER ROOM :

- i} Electric cable shafts shall be exclusively used for electric cables and should not open in the staircase enclosure.
- ii} Inspection door for the shaft. If provided. Shall have two hours fire resistance.
- iii} The door of the meter room shall have fire resistance of two hour.
- iv} Electric cable shafts shall be sealed at each floor level with non-combustible material such as vermiculite concrete.

9.

ESCAPE ROUTE LIGHTING :

Escape route lighting { staircase and corridor lighting } shall be on independent circuits as per rules.

10.

AIR CONDITIONING SYSTEM : { If Central A.C. Provided }

- i} Escape routes such as staircase, Corridors, passages, lift lobbies etc. shall not be used as return air passages.
- ii} A.C. ducting shall be constructed for substantial metal gauge as specified under IS : 665 : 1963 for metal air ducts { revised }.
- iii} Wherever the A.C. ducting passages through the wall the openings from the duct shall be sealed with fire resisting / non-combustible material such as vermiculite concrete.
- iv} AHU shall be independent for each floor / occupancy zone. In any case, the AHU shall not be required to serve more than one floor / occupancy.
- v} The insulating material if provided to A.C. ducting either from inside or outside, shall be of noncombustible material such as glass wool covered with aluminum foil or spun glass with neoprene facing or any other similar material.
- vi} The material used for false ceiling and its runners and suspenders shall be of non combustible type.
- vii} Metallic ducts shall be used even for the return air instead of space above the false ceiling.

G. ALTERNATE SOURCE OF POWER SUPPLY.

An alternate source of LV/HV supply from a separate substation with appropriate changeover over switch shall be provided for fire lifts, fire pumps, booster pump, sprinkler pump, jockey pump, staircase and corridor lighting circuits and manual fire alarm system. It shall be housed in separate cabin.

H. PORTABLE FIRE EXTINGUISHERS.

- i) One dry chemical powder type fire extinguisher of 10kgs. capacity having ISI certification mark and two buckets filled with dry, clean sand shall be kept in electric meter room.
- ii) Ten dry chemical powder type fire extinguishers of 10kgs. capacity having ISI certification mark and four buckets filled with dry, clean sand shall be spread over the each level basement area.

12. FIRE ALARM SYSTEM.

Each building shall be provided with manual fire alarm system with main control panel at ground floor level and pillbox and hooters at each of the upper floors. The layout of the fire alarm system shall be in accordance with Indian Standard Specification.

Additionally automatic smoke detection system shall be provided for the entire office area, meter rooms & lift machine rooms.

13. REFUGE AREA.

Terrace floor of the building shall be treated as refuge area and shall be provided as under.

- i) The entrance door to the refuge area shall be painted or fixed with a sign painted in luminous paint mentioning "REFUGE AREA IN CASE OF EMERGENCY".
- ii) Adequate drinking water facility shall be provided in the refuge area.
- iii) Adequate emergency lighting facility connected to the electric circuit to the staircase, corridor / passage etc. lighting shall be provided.

The party has paid the capitation fees of Rs1,71,400/- vide receipt no. 0368320 dated 05.02.2005 on the gross built-up area 17,139.00 sq. mtrs. as certified by the architect by vide their letter dated 31.01.2005.

(copy filed)
C. F. O.
11/11/05