

MUNICIPAL CORPORATION OF GREATER MUMBAI
MUMBAI FIRE BRIGADE


No. : FB/H/OD/ 27

Date : 05.04.2019

SUB: Open space requirement for the high-rise building as per DCPR 2034 regulations.

As per the directives of Hon M.C.'s, the joint meeting was conducted with stake holders (PEATA, MCHI-75CREDAI & NAREDCO) on 01.04.2019 and the concern of all stake holders was taken into consideration. After discussion regarding above subject matter, all members present in the meeting has agreed for the proposed change, which is as per the draft for approval. (page C-29 to C-35)

Submitted for approval please.


(P. S. Rahangdale)
Chief Fire Officer
Mumbai Fire Brigade

(Ajoy Mehta)
Hon. M.C. Sir,

Approved as proposed.

Ajoy Mehta

7/5/19

Municipal Commissioner

CFO

बृहन्मुंबई महानगरपालिका आयुक्तांचे कार्यालय	
5 APR 2019	
संख्या	११, १२, १३, १४ १५, १६, १७, १८
कार्यालय	MGC/F/8902

(info)

10/05/2019.

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DRAFT FOR APPROVAL
MUNICIPAL CORPORATION OF GREATER MUMBAI
MUMBAI FIRE BRIGADE

No. :

Date :

Sub.: Open space requirement for the high-rise buildings as per DCPR 2034 regulations.

DCPR 2034 regulations part IV section 47, (A) & (B) are in the reference with open space requirement and concession therein which is as follows:

(A) For proposal under regulations 33 (5), 33 (6), 33 (7), 33 (7)(A), 33(9), 33(9) (A), 33(9)(B), (10), 33 (10)(A), 33(11), 33(15), 33(20)(A)

a) In case of rehabilitation /composite buildings having height more than 32 m up to 70 m, at least one side other than road side, shall have clear open space of 6 m at ground level, accessible from road side.

Provided, if the building abuts on two roads having width of 6.0 m, the clear space of 9m shall be available including abutting road in front of the building and the 6m roads shall be connected to the road of having width of at least 9m.

However, if podium is proposed it shall not extend beyond 6m from building line so as to have clear open space of 6 m at ground level beyond podium accessible for fire appliances.

No ramps for the podium shall be provided in these side open spaces.

(B) For the proposals, other than (A) above

a) Buildings having height more than 32 m upto 70m, at least one side, accessible from road side, shall have clear open space of 9 m of ground level.

Provided, if the building abuts another road of 6 m or more and clear space of 9m at ground level is available including abutting road or building abuts another road of 9 m then condition shall not be insisted upon.

However, if the podium is proposed it shall not extend beyond 6m from building line and shall have clear open space of 9m at ground level OR if the podium is proposed it shall not extend beyond 6 m from building line and shall have clear open space of 6m beyond podium & 9m at ground level with clear height of 4.5 m from ground to podium (below soffit of the beam) for accessibility of fire appliances.

No ramps for the podium shall be provided in these side open spaces.

The open space requirement stipulated under 47 A (a) is 6 mtrs. for the building height more than 32 mtrs. up to 70 mtrs.

However, Regulation (B) proposal other than (A) above wherein building having height more than 32 mtrs. up to 70 mtrs. requirement of open space is 9 mtrs. at ground level.

- Taking in to consideration Time Vs Temp basic fire configuration graph in case of fire, for effective fire fighting and self rescue, mechanism the building itself shall provide with fire safety mechanism for self rescue by inmates in case of emergency.
- All structural fire fighting and rescue operations in case of high rise buildings are very effectively and mostly being carried out within the building using Fire escape staircase and fire safety installation of the building. The building which adheres to recommendations given by fire brigade and carried out regular maintenance of fire safety installations, in case of any fire emergencies, the fire fighting installations are used by inmates or auto activated installation or use by the fire brigade

personnel are useful to contain fire and there by resulting in efficient fire & rescue operations.

- The open space requirement for the building in comparison to the height in based on resource requirement and maneuverability of fire appliances in case of emergency.
- The rehab buildings and SRA buildings which constitute 70% to 80% in such kind of buildings deployment of specialized ladder if required (ALP, TTL) minimum 32 mtrs. to 90 mtrs. are required to be pitched in case of emergency for the fire fighting and rescue operations. The highest special appliances i.e. of 90 mtrs, available with Mumbai Fire Brigade can effectively operate upto 70 mtrs to 80 mtrs. height depending upon the open space, angel of elevation for the ladder and point load 10 kg/cm² capacity of the ground / slab where jacks are needed be stabilized. Because of non- compliance as stated above, to prepare for any emergency Mumbai Fire Brigade has procured special appliances.
- The open space requirement for the jacking and stabilizing special appliances (ALP, TTL) as stipulated above varies with the height of the building.
- The open space also is required for protection from radiation of heat from the adjoining premises in case of emergency.
- In case of serious fire emergency the building due to the non maintenance of fire fighting requirement (Fire Fighting Pump, Riser System, Sprinkler, Detector etc.) huge resources required to be deployed by the fire brigade (BA Sets, Intermediate pumps and specialized vehicles depends upon circumstances) which is very difficult and time consuming (Annexed herewith)
- For the building having height more than 70 mtrs, in DCR 48 (9) (B) Fire Tower concept is already being implemented, (Annexed as). Also the specification for the fireman lift within fire fighting shaft was

approved of Hon. M.C. under No.MGC/A/5801 dated 31/01/2018, (Annexed as). And also as per the NBC Part IV 2.24 to deploy the resources incase of emergency fire shaft requirements is being stipulated for fire fighting and rescue operations in buildings having height more than 15 mtrs.(Annexed as).

Taking into the consideration of the heights of the buildings, the open space requirements, mobilizing of resources required in case of emergency, maneuverability of fire appliances following guidelines are proposed as regards to Regulation 47, Fire Protection section B:

(B) For the proposals, other than (A) above

- (a) The building having height more than 32 mtrs up to 45 mtrs, above 45 mtrs upto 58 mtrs and above 58 mtrs up to 70 mtrs, atleast one side accessible road side shall have clear open space of 6.0 mtrs, 7.50 mtrs & 9.0 mtrs respectively at the ground level.

However, if the podium is proposed it shall not extend beyond 6 mtrs from building line and shall have clear open space for buildings more than 32 mtrs upto 45 mtrs, above 45 mtrs upto 58 mtrs and above 58 mtr upto 70 mtrs, at least one side accessible road side shall have clear open space of 6.0 mtrs, 7.50 mtrs and 9.0 mtrs respectively at the ground level for accessibility of fire appliances with clear height of 4.50 mtrs from ground to podium (below soffit to the beam) for accessibility of appliances.

Provided, if the building abuts another road of 6 mtrs or more and clear space of 9 mtrs at ground level is available including abutting road or building abuts another road of 9 mtrs then condition shall not be insisted upon.

No ramps for the podium shall be provided in these side open spaces.

OR

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The building height more than 32 mtrs up to 70 mtrs, if one of the lift is provided within the external staircase at landing/mid-landing level as per Regulation 48 (9) (b) of DCPR 2034 shall have clear open space of 6.0 mtrs at ground level. (Illustrated diagram Annexed as). In such case second lift will not be required as fire lift.

No ramps for the podium shall be provided in these side open spaces.

The above amendments are forwarded for taking in to consideration to-

- a) That building it-self should have the facility for fire suppression as well as safe evacuation, for the safe sustainable development of the city.
- b) For deployment of resources by the fire personnel in case of emergency if needed, for effective fire - fighting and rescue operations.

Submitted for consideration please.


(P.S. Rahangdale)
Chief Fire Officer

(Ajoy Mehta)
Hon M.C. sir,