# BRIHAN-MUMBAI MUNICIPAL CORPORATION MUMBAI FIRE BRIGADE

**Sub:** Provisional Fire Safety Approval from fire protection & fire-fighting point of view for proposed Amendments, Regularization of Additions-Alterations, Internal Changes in existing school building, on land bearing C.T.S. Nos. 7/20 & /21 of Village Kopari, Taluka Kurla, MSD, Powai, Mumbai-400076.

- **Ref:** 1. Online submission by Owner- M/s. Bunt's Sangha Mumbai and Architect Taranath Mahalinga Shetty of M/s. Taranath Shetty & Associates.
  - 2. Online File no. CE/643/B.P.E.S./AS-CFO/1/New

### Owner- Shri Radhakrishna Shetty,

In this case, please refer to the Full Occupation Certificate issued by E.E.(B.P.) u/n. CE/643/BPES/AS dated-01.02.2005 for low rise School Building having ground floor + stilt (part) + 03 upper floors, thereafter 4<sup>th</sup> & 5<sup>th</sup> floor was amended and approval was done on 15.09.2006 and full occupation was granted on 24.09.2008. The total height of the existing building for ground + 05 upper floors is 22.86mtrs. from general ground level up to terrace level.

Further, please refer to the **Amendment** Provisional Fire Safety Approval issued by this office u/r. no. FB/HR/ES/92 dated-26.08.2009 stipulating fire-protection & fire-fighting requirements for the construction of High-Rise school building having ground floor on stilt (part) + 10 upper floors with a total height of 44.54mtrs. from general ground level up to terrace level.

- Now, the Architect has uploaded plans for issuing Provisional Fire safety requirements for proposed amendments & Additions-Alterations, Amalgamation-Internal Changes in Existing School Building are as follows;
- 1. Proposed to delete 02 upper floors i.e. 9<sup>th</sup> & 10<sup>th</sup> floors from earlier approved and partly occupied building. However, the height of the building is only 35.45mtrs. as shown on plans instead of 44.54mtrs.
- 2. Architect has proposed 02nos. of additional lifts from external side of the building on East & West sides respectively.
- 3. In earlier provisional fire safety approval, Architect has provided entire 7<sup>th</sup> floor as refuge floor, in view of large occupancy of students at one time in building. Now, Architect has proposed refuge area 104.84sq.mtrs. at 7<sup>th</sup> floor. Hence, E.E.(B.P.) is requested to scrutinize the plans from F.S.I. point of view.
- 4. Proposed minor changes in internal planning of the existing building and also proposed changes in earlier approved plans. However, floor wise users of the building are as under;

Floors	Occupancy per floor		
Ground floor	Double height Multipurpose hall with stage, sound machine room		
	& changing room + sports room + sport store + 04nos. of class		
	rooms + play school + waiting area + pantry + mechanical room		

	+ chairman's cabin + office + locker room + server room + day				
	care centre + canteen with kitchen & store room + toilets blocks				
	+ double height entrance lobby				
1st floor	09nos. of class rooms + 02nos. of breakout rooms + 02nos. of				
	store rooms + back office + music store + discussion area +				
	gathering area + tuition room + study area + dance room + chi				
	counselling room + toilet blocks				
2 <sup>nd</sup> floor	10nos. of class rooms + language lab + I.T. storage + staff room +				
	music room + storage for science room + laboratory + storage for				
	general books + IT room + AV room + discussion area + tuition				
	room + breakout room + toilet blocks				
3 <sup>rd</sup> floor	10nos. of class rooms + music room + art room + atlas room +				
	02nos. of tuition rooms + 02nos. of study area + 02nos. of				
	breakout area + back office + demonstration room + examination				
	paper storage room + counselling room + 02nos. of discussion				
	rooms + storage room + lockers room for staff + toilet blocks				
4 <sup>th</sup> floor	14nos. of class rooms + office + gathering room + history study				
	room + science study room + 03nos. of back offices + breakout				
	room + music room + art centre + toilet blocks				
5 <sup>th</sup> floor	09nos. of class rooms + data centre + chemistry lab + server room				
	+ biology lab + 02nos. of offices + back office + physics lab +				
	examination paper storage room + office computer storage + office				
	storage + A.V. room + projector room + tiffin room + toilet blocks				
6 <sup>th</sup> floor	08nos. of class rooms + computer storage rooms + office + retiring				
	room + gathering area + discussion room + staff room + storage				
	room + toilet blocks				
7 <sup>th</sup> floor	10nos. of class rooms + I.T. lab + server room + projector room +				
	BSC IT faculty room + back office + lift room + breakout roo				
	tuition room + toilet blocks + refuge area				
8 <sup>th</sup> floor	14nos. of class rooms + physics lab + room + storage for books +				
	toilet blocks				

#### **REFUGE AREA**

Refuge Floor	Refuge area in sq. mtrs.		At the Height of
1101460 1 1001	Required	Proposed	Refuge area in mtrs.
7 <sup>th</sup> floor	101.15	104.84	27.06

In addition to that terrace of the building will be treated as refuge area. E.E.(B.P.) shall verify the refuge area calculation & Excess refuge area shall be counted in F.S.I.

Party has informed that the timber, plywood etc. used on site will be treated/painted with fire retardant paint. The doors provided at main entrance, of each office, each banquet hall, etc. shall be FRD.

Authenticity/approval of the existing school building shall be inspected, verified & approved by concerned municipal authorities till then shall not be allowed to use.

The Architect is requested to ensure & verify civil work, interior work & all other requirements pertaining to Civil Engineering side including open spaces, electric shaft & other ducts, common corridors, staircases, doors, windows, window grills, civil work of the entire building, emergency lighting, height & floor occupancy of the building, F.S.I. etc. as per building plans.

### • The Architect has uploaded following documents online;

- 1. **Area Certificate** submitted by M/s. Taranath Shetty & Associates, Architects, Interior Designers for the total gross built-up area of 12,995.67 sq. mtrs., dated 05.09.2024.
- 2. <u>Structural Stability Certificate</u> dated 04/09/2024 issued by, er. Sameer S. Jeste of M/s. Global Structcon, Chartered Structural Engineer having License No. STR:840010203.
- 3. **Form 'B' Certificate** dated 04/07/2024 for installation of fire-fighting system & detection system from M/s. Rakshak Fire Safety Engineers, bearing License No. MFS/LA/RF-210/RD-199.

# > The proposal has been considered favorably taking into consideration the following;

- 1. This is an existing school building having ground & 05 upper floors with a total height of 22.86mtrs.
- 2. The fire-fighting measures are already recommended for the said high rise school building in earlier fire safety requirement letters u/r. No FB/HR/ES/92 dated-26.08.2009.
- 3. As per Reg. 2(IV)(17)(vi)(g) of DCPR-2034, the said educational building comes under Institutional Building Category and as per Reg. 2(IV)(17)(vi)(n) of DCPR-2034 the said building comes under Special Building category. Also, the height of the building is more than 32.00mtrs. i.e. 35.45mtrs. Hence as per Reg. 37(15)(Table No. 16) (Sr. No. 2) 2.00mtrs. wide enclosed type staircases for the building is required. And as per Reg. 41(6)(a) of DCPR-2034 6.00mtrs. wide open space all around the building is required. But this is an existing building & there is no scope to provide 2.00mtrs. wide enclosed type staircases & 6.00mtrs. wide open space all around the building. Hence, 02nos of staircases having width of 1.73mtrs. each and open space deficiencies are considered with additional fire safety requirements subject to approval of Hon. M.C. sir.
- 4. Feasible active & passive fire-protection & fire-fighting requirements or any additional fire recommendation / requirements if any for proposed building will be recommended in future from Mumbai Fire Brigade Officer before final occupation.

In view of above, as far as this department is concerned, there is provisional fire safety approval from fire safety point of view & fire-fighting safety requirements for proposed amendments, Additions-Alterations, Internal Changes, in the High rise School Building having ground floor & 08 upper floors for school purpose with a total height of 35.46mtrs. from general ground level up to terrace level, as shown on the plans, signed in token of approval, subject to satisfactory compliance of the following fire safety requirements.

It is responsibility of owner / occupier to take compliance of following fire safety requirements from CFO's Dept. before actual commencement of the activity. The Concerned department shall ensure that activity is not commenced till compliance report of this department is issued.

All fire safety measures stipulated earlier fire protection & fire-fighting requirements issued by this office shall be strictly adhered to along with the following additional fire protection & fire-fighting requirements.

## 1. General Requirements

- a) Original framework of structure & elements of the structure i.e., Beams, columns, load bearing walls, floors etc. should not be disturbed by chipping, tampering etc.
- b) Fire exit passage door, entry & exit door of Premises should be solid core having fire resistance of not less than 01-hour (solid wood of 45 m.m. thickness). Wherever timber, plywood, wooden partition etc. used on site will be treated / painted with fire retardant paint.
- c) Internal layout & construction, additions & alterations shall be strictly in accordance with the details shown on the plan. No change of any kind shall be carried out without obtaining prior permission from C.F.O. Department.
- d) The Entrance, common corridor / passages / lift lobby, means of escape staircases shall be kept free from obstructions, encroachments, storages etc. & minimum 01.50 mtr. wide passage shall be kept & maintained throughout the premises to have easy means of escape in the event of an emergency.
- e) False ceiling, suspenders / runners shall be of non-combustible materials.
- f) Escape routes shall be indicated with fluorescent paint signage.
- g) No loft shall be constructed on the premises.
- h) The electrical wiring shall be having copper core & shall be laid in metal conduit pipes continuously bonded to earth.
- i) Approved type of electric circuit breakers shall be provided at the main electric distribution board.
- j) Electric mains shall be switched off at the close of each working day.
- k) The main electric switch of the premise shall be provided at a suitable location with proper signs.
- l) Luminous signage such as **'Fire Exit,' 'Way to Exit'** shall be provided at suitable locations showing the direction of each exit.
- **2.** All the fire safety requirements stipulated earlier fire-fighting & fire protection requirements vide No FB/HR/ES/92 dated-26.08.2009, under requirement of Refuge area shall be applicable for Refuge area proposed now for the building.

3. Requirement no. 6) (Fire Lift & Other lifts) of Fire Safety Requirement Letter No. FB/HR/ES/92 dated-26.08.2009 shall be modified as:

#### LIFTS:

#### A. PASSENGER LIFT:

- i) Walls enclosing lift shaft shall have a fire resistance of not less than two hours.
- ii) Shafts shall have permanent vent of not less than 0.2 sq. mtrs in clear area immediately at top level.
- iii) Landing doors and lift car doors of the lifts shall be of steel shuttered with fire resistance of one hour. No collapsible shutter shall be permitted.
- iv) Two lifts shall be converted into fire lift as per specifications laid down under the regulations, a toggle switch shall be provided to this lift for the use of Firemen.
- v) Threshold of non-combustible material shall be provided at the entrance of each landing door.

#### B. FIRE LIFT:

- i) To enable fire services personnel to reach the upper floor with the minimum delay, two fire lifts from different lift bank shall be converted into fire lift (excluding fire evacuation lift) and shall be available for the exclusive use of the firemen in an emergency and shall be directly accessible to every dwelling of each floor.
- ii) Walls enclosing lift shafts shall have two hours fire resistance.
- iii) The shafts shall have permanent vent equal 0.2 sq. mtrs. clear area above terrace level.
- iv) Landing doors and lift car doors shall be of steel shuttered type with one-hour fire resistance. No collapsible shutters shall be provided.
- v) The lift shall have a floor area of not less than 1.4 sq. mtrs. with a minimum dimension of 1.12 mtrs. It shall have loading capacity of not less than 545 kg. (8 persons lift) with automatic closing doors.
- vi) There shall be an alternate electric supply of an adequate capacity apart from the normal electric supply the building and the cables run in a route safe from fire, i.e. within the lift shaft. In case of failure normal electric supply, it shall automatically trip over to alternate supply.
- vii) The operation of fire lift should be by a simple toggle or two button switches 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 priority control device. When the switch is off, the lift will return to normal working. It can be used by the occupants in normal times.
- viii) The words 'Fire lift' shall be conspicuously displayed in florescent paint on the lift landing door at each floor level & Threshold of non-combustible material shall be provided at the entrance of each landing door.

- 4. Requirement no. 8) (Entrance Doors including Staircase & each room, office & lab entrance) of Fire Safety Requirement Letter No. FB/HR/ES/92 dated-26.08.2009 shall be modified as:
  - i) All entrance doors including flat entrance, etc. shall be of solid core having fire resistance of not less than one hour.
  - ii) The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors shall be as per N.B.C. provisions.
- 5. Requirement no. 9D) (Automatic Sprinkler System) of Fire Safety Requirement Letter No. FB/HR/ES/92 dated-26.08.2009 shall be modified as:

Automatic sprinkler system shall be provided in entire school premise including each class room, each office, each storage area, each lab, I.T. room, projector room, breakout room, tuition room, computer room, Multipurpose hall, server room, music room, art room, etc. If there is existing automatic sprinkler system then same shall be maintained, modify & ensure that same shall not be affected due to proposed addition & alteration & shall be effectively operate in case of emergency.

6. AUTOMATIC SMOKE DETECTION SYSTEM: (Additional Requirements)
In entire school premises i.e. from ground to 8th floor shall be provided with automatic smoke detection system. The layout of smoke detection system shall be in accordance with I.S. specification. If there is existing automatic smoke detection system, then same shall be maintained & ensure that same shall not get affected due to proposed addition/alteration & effectively operate in case of emergency.

#### 7. KITCHEN AREAS: (for Canteen) (Additional Requirement)

- i) Entry to the kitchen areas shall be through fire resisting self closing door of one hour fire resistance.
- ii) The kitchen shall be separately ventilated through vent shafts as well as through exhaust ducting. The exhaust duct shall not pass through any other storage area.
- iii) The exhaust duct shall be provided with grease free ventilators to avoid accumulation of carbon soot and condensed of oil vapors.
- iv) Necessary permission from Medical Officer of Health / C.F.O. for location of kitchen & use of fuel shall be obtained.
- v) Necessary License under Section 394 of BMC Act shall be obtained from concerned ward authorities and CFO's Department for running of canteen and all other licensable trade activities before commissioning the trade activity.

#### 8. MULTIPURPOSE HALL: (Additional Requirement)

- i) The entrance & exit doors shall open outside & same shall have fire resistance of not less than two hour.
- ii) Acoustic and thermal insulation shall be of non-combustible materials.
- iii) Flooring shall be of non-combustible materials, P.V.C. Flooring shall not be provided.
- iv) All the electrical wiring shall be in metal conduit continuously bonded to

earth.

- v) Dry Chemical Type (ABC Type) fire extinguishers of 06kgs. capacity each with BIS certification mark and shall be kept in every 100sq.mtrs. area in Auditorium.
- vi) No fixed seating arrangement shall be made in auditorium
- vii) No open flame shall be used in anywhere within premises.
- viii) Fabrics and clothing used shall be treated with fire-retardant material.
- ix) Automatic sprinkler system & Automatic smoke detection system shall be provided in multipurpose hall.
- x) Necessary permission if require shall be obtained from concerned department & M.C.G.M.'s department/C.F.O.'s department till then further process shall not be permitted.

# 9. PRESSURIZATION / MECHANICAL VENTILATION SYSTEM FOR STAIRCASE AND LOBBY:-

- a) The pressurization system shaft for lift lobby & Staircase shall be provided.
- b) The pressurization system shall activate on activation of smoke detection system of the building.
- c) Smoke detectors with audible alarm shall be provided in staircase & lobby on each floor shall be provided and connected to pressurization system to start automatically on activation of smoke detector.
- d) The pressurization will start automatically on activation of detector provided in Staircase.
- e) The manual operating switches to actuation of pressurization ventilation system shall be located at BMS room on ground floor of the building.
- f) The pressurization in Staircase & Lobby shall be maintained continuously to avoid the ingress of smoke in common corridor/ lobby & Staircase.
- g) The pressurization in staircase and common corridor shall be maintained above 1.2 bar or above atmospheric pressure and shall be more in case of fire emergency.
- h) The staircase & common corridor pressurization system shall be as per NBC/NFPA Codes or other related specification.
- 10. It shall be ensured that the entire fire protection & fire prevention system installed in the building as per CFO's fire protection & fire fighting requirements issued shall be kept in good working condition at all times.
- **11.** The staff shall be trained to communicate in case of emergency to the concern authority i.e., Police, Fire Brigade & in basic fire-fighting and use of fire extinguishers kept on the premises.
- **12.** Authenticity of the structure, area, premises & trade activity if any shall be verified by concern Municipal Authorities, till then further process shall not be permitted.
- **13.** No changes except as stated above and as shown on the enclosed plans shall be carried out on the premises unless permitted by this department.
- **14.** The other permission/rules applicable shall be obtained from other concerned departments/authority to make the activity legalized and regularized.
- **15.** The structural stability certificate from the competent authority shall be obtained before commencement of the proposed work.

- 16. After the completion of above said work Architect should apply to this department for acquiring compliance certificate. If party failed to get the compliance certificate from this department this recommendation letter shall be treated as cancelled & further process shall not be permitted.
- **17.** Electrical Audit & its compliance shall be done as per the rule.
- **18.** This Fire safety requirement is issued from fire risk & life safety point of view only, and without prejudiced to any legal matter pending before court of law.
- **19.** All civil engineering side shall be scrutinized, verify & confirm by the E.E.B.P.(E.S.) and necessary required permission / rules applicable shall be obtained from other concerned departments / authority to make the activity legalized and regularized.

Earlier the Party had paid the Capitation fee of Rs. 1,33, 250/-, Vide receipt No. 0855502, dated 04/08/2009 on the gross built up area of 13,325.00 sq. mtrs. as certified by the Architect.

Now, the Party had paid additional Scrutiny fees of Rs. 197,550/-, vide, Online Receipt No. 23/10/2024/33057 dated 23/10/2024, on the gross built-up area of 12,995.67 sq. mtrs. sq. mtrs. as certified by Architect.

However, E.E. (B.P.) E.S. is requested to verify the total built-up area & inform this Department, if the same is found to be more for the purpose of levying additional Scrutiny fees, if required.

Now, the Party had paid **Fire Service fees** of Rs. 1,975,350/-, vide, online Receipt No. 23/10/2024/33057 dated 23/10/2024, on the gross built-up area of 12,995.67 sq. mtrs. as certified by Architect.

Now Architect has uploaded undertaking on 500/- stamp paper, dated 10.12.2024 & stated that as per MF & LSM Act 2006 (2007 of Maha-III) & MF & LSM Act amended 2023 & circular from Directorate of Maharashtra Fire Services vide no. मअसे-2023/59/895 dated 02.06.2023 fire & emergency fee is applicable from 30th May 2023. However, party shall pay fire service fee levied along with interest and stated that they will pay Fire service fee as per Maharashtra Fire Prevention & Life Safety Measure (Amendment) Act- 2023, as and when demanded by Mumbai Fire Brigade.

#### Notes:

- 1. All the points mentioned in the notes in previous Fire Safety Requirements issued by this office shall be taken into considered in this Fire Safety Requirements.
- 2. This Fire safety requirements are issued only from Fire safety point of view, permissibility of school activity from ground floor to 08 upper floors same shall be verified by E.E.B.P. before granting further permissions.
- 3. The fire-fighting installation shall be carried out by Govt. of Maharashtra approved Licensing Agency
- 4. The width of abutting road & open spaces is mentioned in plans as submitted by the Architect attached herewith and these parameters shall be certified by the Architect.

- 5. E.E.B.P (E.S.) shall verify the proposal in context with the relevant Regulations of DCPR-2034.
- 6. The schematic drawings/plans of automatic sprinkler system, automatic smoke detection system, wet riser system, public address system, manual fire alarm system shall be got approved from CFO.
- 7. The area, size, etc. for the sprinkler system, detection system, fire alarm system, wet riser system, public address system, Fire duct, electrical duct etc. to be verified & examined by MEP Consultant.
- 8. Separate necessary permission for any licensable activity shall be obtained from concerned authorities of BMC/CFO's department, till then shall not be allowed to use.
- 9. There shall be no any tree located in the compulsory open spaces or in the access way near the Entrance gates.
- 10. This approval is issued only from Fire Protection & Fire- Fighting requirements point of view on behalf of the application from Architect. If any matter pertaining to authenticity or legality shall be cleared by concerned Owner/Occupier/Developer/ Architect, etc
- 11. The plans approved along with this approval are issued from Fire Risk & Life Safety point of view only. Approval of these plans does not mean in any way of allowing construction of the building. It is Architect/Developers responsibility to take necessary prior approval from all concerned competent authorities for the proposed construction of the building
- 12. As per section 3 of Maharashtra Fire Prevention and Life Safety Measures Act 2006, it is the liability of Owner/Occupier to provide the Fire Protection measures & Fixed Fire Fighting Safety system installations and shall be maintained in good working order & in efficient condition all the time, in accordance with the provisions of Maharashtra Fire Prevention and Life Safety Measures Act or the rules.
- 13. This approval is issued without prejudice to legal matters pending in court of law, if any
- 14. At the time of compliance the fire safety compliance certificate from this department regarding AVS & mechanical ventilation same shall be obtained from M & E department or any competent authority as per DCPR-2034.
- 15. With reference to Maharashtra fire prevention & life safety measure Act 2006 (2007 of Mah III) & Maharashtra fire prevention & life safety measure Act amended 2023 and circular from Directorate of Maharashtra fire services vide no. मअसे -2023-59/895 dated 02/06/2023, fire and emergency fees is applicable from 30/05/2023. However, the guideline for the fee calculations from Maharashtra fire services & circular from Mumbai Fire Bridge is not yet received. Hence Architect. / Developer shall pay the necessary fees as per the demand note from this office, in future before final occupation.
- 16. As per Reg. 2(IV)(17)(vi)(g) of DCPR-2034, the said educational building comes under Institutional Building Category and as per Reg. 2(IV)(17)(vi)(n) of DCPR-2034 the said building comes under Special Building category. Also, the height of the building is more than 32.00mtrs. i.e. 35.45mtrs. Hence as per Reg.

37(15)(Table No. 16) (Sr. No. 2) 2.00mtrs. wide enclosed type staircases for the building is required. And as per Reg. 41(6)(a) of DCPR-2034 6.00mtrs. wide open space all around the building is required. But this is an existing building & there is no scope to provide 2.00mtrs. wide enclosed type staircases & 6.00mtrs. wide open space all around the building. Hence, 02nos of staircases having width of 1.73mtrs. each and open space deficiencies are considered with additional fire safety requirements subject to approval of Hon. M.C. sir.

RAJENDRA Digitally signed by RAJENDRA
BAJARANG BAJARANG GHADGE Date: 2025.02.07
16:59:43 +05'30'

Divisional Fire Officer (Scrutinized & Primary Approval by)

Chief Fire Officer (Final Approval by)

#### Copy to:-

- 1. E.E. (B.P.)
- 2. <u>Shri.</u> Architect Taranath Mahalinga Shetty of M/s. Taranath Shetty & Associates