



**Government Of West Bengal
Office Of The Deputy Director
West Bengal Fire & Emergency Services
Station Feeder Road, P.O & P.S Siliguri,
District: Darjeeling, Pin - 734005**

Memo no.:FSR/0125186210500158

Date: 06-08-2021

From:
Deputy Director
North Zone, HQ Wing,
West Bengal Fire & Emergency Services

**To: PRPOSED FOUR (G PLUS 3) STORIED RESIDENTIAL COMPLEX OF M/S MSL INDIA
SHISHABARI,CHAMPASARI,SILIGURI,WEST BENGAL,PIN - 734003**

Sub: Fire Safety Recommendation for the proposed Construction of G+3 (Block- A & B) Storied Building Under Group Residential Building, at the premises No: Mouza – Shishabari, Pargana- Patharghata, Khatian No- L.R.- 2614, - R.S: 26, 73, 111, 287, 289, 293, Plot No- - R.S- 65, 66, 69, & 95 (P), L.R: 150, 154, 155, 159 & 162(P), J.L No- 41, Panchayat- Champasari G.P, P.O- Champasari, P.S- Pradhan Nagar, District- Darjeeling

This is in reference to your application no. 0125186210500158 dated 24-07-2021 regarding the Fire Safety Recommendation for the proposed Construction of G+3 (Block- A & B) Storied Building Under Group Residential Building, at the premises No: Mouza – Shishabari, Pargana- Patharghata, Khatian No- L.R.- 2614, - R.S: 26, 73, 111, 287, 289, 293, Plot No- - R.S- 65, 66, 69, & 95 (P), L.R: 150, 154, 155, 159 & 162(P), J.L No- 41, Panchayat- Champasari G.P, P.O- Champasari, P.S- Pradhan Nagar, District- Darjeeling

The plan submitted by you was scrutinized and marked as found necessary from Fire Safety point of view. In returning one set of plan with recommendation, this is issuing Fire Safety Recommendation in favor of the aforesaid building subject to the compliance of the following fire safety measure.

Recommendation:

(A)Construction Part:- (i) The whole construction of the proposed building shall be carried out as per approved plan & conforming all the relevant building rules of local authority (ii) The floor area exceeds 500 sq. meter shall be suitably compartmented by separation walls up to ceiling level having at least two hrs. fire resisting capacity. (iii) The interior finish decoration of the building shall be made of low flame spread materials conforming I.S Specification. (iv) All construction materials should be of four hrs. Fire resisting type. (v) Door and windows should be of at least 2 hrs. fire resisting type (vi) All opening of service ducts, void, gap, and joints should be sealed with fire check materials

(B)Open Space & approach:-(i) The open space surrounding the building shall conform the relevant building rules as well as to permit the accessibility and maneuverability of fire appliance to turning facility. The minimum open space surrounded

the building should be at least four meters and it should be free from any obstruction at all times. (ii) The approach roads shall be sufficiently strong to withstand the load of fire engine weighting up to 22.5 M.T. (iii) The width and height of the access gates into the premises shall not be less than 4.5 meters & 5 meters respectively.

(C) Means of escape: -(i) The Staircases of the building shall be enclosed type & construction shall be made of bricked/RCC type having fire resistance capacity not less than 2 hrs. (ii) The staircase of the building shall have permanent vents at the top and open able sashes at each floor level in the external wall of the building. (iii) Preferably the width of the staircase shall be 1.5 meters. Corridors of the building and the exit doors shall conforming the relevant building rules. (iv) All the staircase shall be extended up to terrace of the building and shall be negotiable to each other entering into any room. (v) Fire & Smoke doors at the entrance of all the staircases enclosures preferably at each floor level shall be provided. The F.C.D shall be at least one hour fire resisting type & fitted with self closing type open able in the direction of the escape (vi) Horizontal exits should be given priority. (vii) Time of evacuation should be as per IS:-1644-1988 i.e. 2.5 minutes. (viii) Separate entrance and exit shall be provided to every room in the building.

(D) Lift : - (if any) (i) The walls of the enclosures shall be at least two hrs. fire resisting type and collapsible gate shall not be permitted. Lift materials shall be 4 hrs. fire resisting type. (ii) The door of the lift should be 1 hr fire resisting type. (iii) The landing door should be 30 minute fire resisting type. (iv) The area of the lift shall be minimum 1.4 sq.mtr and the load bearing capacity should be minimum 554 kg.

(E) Sprinkler installation: The automatic sprinkler installation shall be provided where is applicable as per I.S 9972 and alarm to be incorporated along with the sprinkler system.

(F) Banquet Hall/ Conference hall (if any) : The doors/aisles/gangway/cross gangways/ seating arrangement/corridors in hall etc. shall be made as per good practices of National Building Code, Part-IV. Fire protection as well as the conforming norms of cinematograph Act. With upto date amendment.

(G) Electrical installation & Distribution (IS-694:1946-1982) :- (i) All electrical installation should be done in accordance with N.B. Code & Part-VIII " Building Service" Section-2 "Electrical installation" good practice.[4(10)]. (ii) The electrical installation including transformers, switch gears, main and meter etc. and The distribution system of the premises shall be made satisfying the code of practice for Fire Safety in general building as laid down in I.S Specification. (iii) The vertical and horizontal electrical ducts shall be sealed at each floor level by fire resisting materials and the electrical installation shall be adequately protected with ABC & CO-2 type extinguisher. (iv) All cable should be of FRLS type & all wiring should be done by copper wire along with appropriate gauge such as 1.2 mm. for light, fan ,bulbs etc, 2.5 mm for television, freeze & washing machine etc. 4 mm for geezer, air condition machine etc. (v) The indoor Transformer shall be protected with high-velocity water spray projector system.

(H) Alternate power supply :- Arrangement shall be made to supply power with the help of a Generator to operate at least the fire pump, pump for deep tube-well ,Fire alarm system, Fire Lift ,illuminating the passages, basement , escape routes etc. in case of normal power failure.

(I) In case of Air Condition:-IS: 659-1991:- (i) Regular check up of all split type window A/C machine to prevent dust, foreign materials in the air inlet should be maintained to prevent spontaneous combustion. (ii) In case of central A/C system ,the same shall be incorporated with automatic damper with fusible link with a view to shut down the system automatically. (iii) Regular checking, testing, cleanings the air inlets is must. (iv) Escape routes like corridors, lift lobbies etc. shall not be used

as return air passage. (v) AHU shall not be used for storage of combustible articles.

(J) Terrace Tank:- One Terrace Tank of capacity Minimum 10000 liters (5000 ltrs + 5000 ltrs) should be installed in the building along with suitable terrace pump with minimum pressure of 3.5 kg/cm² capable of discharge 450 L.P.M incorporate with Down comer system with floor wise landing out let each building separately should be ensured..

(K) External Hydrant System:- IS-13039-1991:- The whole area of your building is to be protected by adequate no. of pillar type hydrants system i.e. @ one pillar hydrant per 1000 sq. meters of enter area in the premises or as per the vulnerability of the place.

(L) Small gears:- IS:903-1993:- Hose box, 15 meter length per Moline delivery hose, gunmetal short branch of half inch dia @ one set each at or near all the pillar hydrants, landing valves on floors should be installed.

(M) Hose Reel System:- IS 884-1985, :- The building should be equipped with Hose reel hose system at each floor as per the IS Code of practice. The internal dia of the said hose reel shall be 19 mm to 32 mm and the discharge capacity not less than 22.5 LPM. While the length of the hose reel not more than 36.5 meters. The distance of such installation should be in such a way that no part of the floor is more than 6 meters distance from a hose nozzle when fully extended.

(N) Detection & Alarm System:- Sufficient Nos. of manually operated electrical fire alarm system of break glass type call boxes and fitted with alarm like hooters with public address system, talk back system at different places of the building shall be installed and connecting with audio visual panel board shall be made in control room as per the IS Code of practice. Other requirements of the system shall be made Conforming I.S. 2189-1988.

(O) First aid fire fighting system:- IS 2190-1992.:- Sufficient Nos. of Portable fire extinguishers of DCP, CO-2 and water type with Sand and water bucket should be provided at different places of the building area and it should be within the reach of all concern as per the I.S Code of practice.

(P) Lighting protection of the building:- This protection for the building shall be provided as given Part:-VIII of building services, Section -2 of Electrical installation.

(Q) Gas Bank:- IS6044-2000:- In case of any cooking gas bank, the same should be installed conforming serial No.4.1.5 & 4.1.6 of the aforesaid I:S code of practice & and after obtaining Fire Service license u/s 12 of W.B F.S(license) rules-2004

(R) General recommendations:- (i) Fire notice for fire fighting and evacuation from the building should be provided and shall be displayed at all places of the building as per clause 5.5 of N.B Code. (ii) Floor No. and Directional Sign of escape route should be displayed prominently as per clause 5.5 of the N.B Code.(Auto glow type). (iii) All the staffs and others shall be conversant with the installed fire fighting equipments of the building so that they can operate the same in case of exigency. (iv) Arrangement shall be made for regular checking, testing and proper maintenance of all fire fighting equipments and keep them in good working condition at all times. (v) Mock fire drill and evacuation drill should be done periodically with participation of all employees and others and in this regard in each year a Certificate is to be obtained from this end as laid down in the norms (vi) A register for the recording of Mock fire drill, Evacuation drill, Testing & Checking of whole Fire fighting installation, Electrical installation should be maintained and shall be liable to produce the same to the authorized Officer of this department on demand. (vii) Good housekeeping should be maintained. (viii) Bulk storage of flammable materials such as chloroform, ethyl, alcohol, spirit etc. will be governed by relevant rules and safe practices.(ix)

close circuit T.V shall have to be provided for the entire floor area of each block of the building.

On compliance of all the above Fire Safety Recommendation, the higher authority , West Bengal Fire & Emergency Services shall be approached for necessary inspection and testing of the installation before occupancy of the building; Fire Safety Certificate in favour of the occupancy shall be issued on being satisfied with the tests and performances of safety of installation of the building.

N.B:- (1)Any deviation and changes the nature of use of the buildings in respect of the approved plan drawings, without obtaining prior permission from this office, this Fire Safety Recommendation will be treated as cancelled.

Deputy Director
West Bengal Fire & Emergency Services

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