



**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/0125186227900179

Date: 26-05-2022

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

To: M/S. Om Malika Arjun Developers LLP Represented By Its Partners Sri Basant Kumar Agarwala and Others.
Ashwini Kumar Dutta Sarani, Ashok Nagar, Ward No.: XXXII, Plot No.: RS 67, LR 610, Kh. No.: RS776, LR 807, 808,
809, P.S.: Bhaktinagar, Dist.: Jalpaiguri.

Sub: Fire Safety Recommendation for proposed construction of G+4 Storied Residential building under group residential represented by Mr Basant Kumar Agarwala in the name " M/S Malika Arjun Developers LLP " at the premises No- Mouza- Dabgram, Sheet No- RS- 15, LR- 168 , J. L. No-02, Khatian No- RS- 776, LR- 807, 808, 809 , Plot No- RS- 67, LR- 610 , Ashwini Kumar Dutta Sarani , Ashok Nagar, Ward NO-17 , PS- Bhaktinagar, Dist- jalpaiguri , Pin-734005.

This is in reference to your application no. 0125186227900179 dated 09-05-2022 regarding the Fire Safety Recommendation for proposed construction of G+4 Storied Residential building under group residential represented by Mr Basant Kumar Agarwala in the name " M/S Malika Arjun Developers LLP " at the premises No- Mouza- Dabgram, Sheet No- RS- 15, LR- 168 , J. L. No-02, Khatian No- RS- 776, LR- 807, 808, 809 , Plot No- RS- 67, LR- 610 , Ashwini Kumar Dutta Sarani , Ashok Nagar, Ward NO-17 , PS- Bhaktinagar, Dist- jalpaiguri , Pin-734005.

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:-

- The whole construction of the proposed building should be carried out as per approved plan of the Municipality / local authority & conforming the relevant building rules of said local authority.
- The floor area exceeds 750 sq. meter shall be suitably compartmented by separation walls up to ceiling level having at least two hrs fire resisting capacity.
- The interior finish decoration of the building shall be made of low flame spread materials conforming I.S Specification.
- All construction materials should be of four hrs. Fire resisting type.
- Doors & windows should be of at least 2 hrs of fire resisting type.

vi) All opening of services ducts, void, gap, joints etc. 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 permit the accessibility and maneuverability of fire appliance with turning facility.

ii) The approach roads shall be sufficiently strong to withstand the load of fire engine weighting up to 45 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 abutting the roads.

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 4 hrs.

ii) Time of evacuation should be as per I:S 1644-1988 i.e. 2.5 minutes.

iii) The width of the staircases shall be 2 meters. Corridors of the building and the exit doors shall conforming the relevant building rules.

iv) The staircases shall be extended up to terrace of the building and shall be negotiable to each other without entering into any room.

v) Fire & Smoke doors at the entrance of all the staircases enclosures at each floor level shall be provided. The F.C.D shall be at least two hour fire resisting with self closing type open able in the direction of the escape.

vi) In no way the travel distance from any point of the building exceeds the limit of 22.5 meters.

vii) 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.

viii) Parking area should not be used for any storage.

ix) There should be two staircases from the ground floor to the terrace of the building.

D) Electrical Installation: 1946:1982:- (I:S-694)

i) All electrical installation should be done in accordance with National Electrical code & part –viii “Building Service” section -2 “Electrical installation” good practice.[4(10)].

ii) All cable should be of FRLS type & all wiring should be done by the copper wire along with appropriate gauge such as 1.2 sq. mm for light, fan, bulbs etc. 2.5 sq. mm for freeze, TV & 4 sq. for geizer, washing machine etc. less than 0.2M2.

iii) Electrical installation shall be tested by the licensed Electricians where as 85 % fire originated from electrical source of energy.

E) In-case of Air Condition:- I:S 659-1991:- It shall conform to the following:-

i) Escape routes like corridors, lift lobbies etc. shall not be used as return air passages.

ii) Regular checkup of all split type window machine to prevent dust, foreign materials in the air inlet should be maintained to prevent spontaneous combustion.

iii) In case of central A.C. system, the same shall be incorporated with automatic dampers with fusible link with a view to shut down the system automatically.

iv) Regular checking, testing, cleaning the Air inlet is must.

v) AHU room shall not be used for storage of combustible articles.

F) L I F T

1) Walls of all lift enclosures shall have a fire rating of 2 h; lifts shafts have a vent area not less than 0.2M2.

2) Lift Motor Room shall be located preferably on top of the shaft and separated from the shaft by the floor of the room.

3) Landing doors in all lift enclosures shall have a fire resistant of not less than half hour.

4) All Lift Car door shall have a fire resistance rating of half an hour.

5) Exit from the lift lobby, if located in the core of the building, shall be through a self closing smoke stop door of half an hour fire resistance.

- 6) Grounding Switch(es), at ground floor level shall be provided on all the lifts to enable the fire service to ground the lifts.
- 7) A sign shall be displayed and maintained on every floor at or near the lift including that in case of fire, occupants shall be the stairs unless instructed otherwise. The sign shall also contain a plan for each floor showing the location of the stairways.
- 8) The lift shall have a floor area of not less than 1.4m². It shall have landing capacity of not less than 545 kg (8 persons lift) with automatic closing doors of minimum 0.8m width.
- 9) In case of failure of normal electric supply, it shall automatically trip over to alternate supply. For apartment houses, 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.
- G) 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, illumination of stairs, corridors, means of escape etc. in case of normal power failure
- H) Fire Fighting Water: -
- i) The building should be provided with 50000 liters capacity of underground stored water with replenishing arrangement @ 1000 liters of water per minutes preferably from two different sources. The height of the reservoir should not be exceeding 30 cm from the ground level. Fire water reservoir shall have overflow and connected with the domestic water reservoir as well as to avoid stagnancy of water. The water reservoir shall be kept full at all times.
 - ii) The location of the underground reservoir should be such so that Fire Service vehicles may get access to the site of the reservoir with a view to draw the water from the said reservoir..
- I) Terrace Tank: - One Terrace Tank of capacity Minimum 10000 liter should be installed in the building along with suitable terrace pump & wet riser cum down comer system.
- J) Hose Reel System: - IS 884-1985, the Hose reel hose system should be provided at each floor of the building. 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 36.50 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.
- K) Pumps for fire fighting Installation. IS-12469-1988.
- i) The pump should be installed and arranged in such manner so that it will start automatically due to fall in pressure as prefixed in the installation by installing a Jockey pump. As per NBC the discharge capacity of the said pump minimum 900 liters per minutes,
 - ii) All the pumps shall be so designed as to supply water at the designed pressure and discharge into the water based system which shall be installed in the building.
 - iii) One such pump shall always be kept on stand by preferably be of diesel driven type.
 - iv) All the pumps shall be incorporated with both normal and auto starting facilities, the suction of the pump shall preferably of positive type or in case of negative suction the system shall be wet riser- cum- down comers with suitable terrace pump fitted with over head tank.
- L) Small gears: - IS 903-1993: - Hose box, 1.5 meters permoline delivery hose & gun metal short branch half inch dia @ one set each at or near all the pillar hydrant, landing valve on all floors of the building should be installed.
- M) Internal Hydrant System: - IS-3844:1989.
- i) Pressurized wet risers of 100 mm dia each should be provided at each staircase with provision of landing valve at each landing and half landing @ one such riser for each 1000 sq. meters of floor area of the building. This system shall be designed in such a manner that it should be kept charged with water at all time and capable of discharge 2250 liters of water per minutes at the ground level & minimum 900 liters per minutes at the top most outlets.
 - ii) In both the cases, the running pressure at ground level shall be 3.5 kg/esq c.m & 2.5 kg per esq.cm at the top most landing valves should be ensured.

N) First aid fire fighting system:-IS 2190-1992. Sufficient Nos. of Portable fire extinguishers of DCP type, Water type and Sand and water bucket should be provided at different places of the building and it should be within the reach of all concern as stated in the IS Code i.e. one no. @ 1000 sq.meters floor area or as per the vulnerability.

O) Detection & Alarm System, Suppression system & Public address system-IS 2189-1988. 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 should be installed & connecting with audio visual panel board shall be made in Control Room as per the IS Code of practice. The control room shall be available in the ground floor.

P) Lighting Protection of the Building: - This protection for buildings shall be provided as given in Part-VIII building services, section-2 electrical installation.

Q) SPRINKLAR INSTALLATION- IS-9972-2002- The automatic sprinkler installation shall be provided in the basement & other vulnerable areas of the building, such as corridors means of escape storage area all strategic location of the building as per code of practice.

R) General recommendations: -

i) Mock drill & evacuation drill should be conducted periodically & in this regard a register for the recording of mock fire drill, evacuation drill, testing and checking of whole fire fighting installation, electrical installation should be maintained & shall be liable to produce the same to the authorized Officer of this department on demand.

ii) 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.C.

iii) 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).

iv) All the occupants and other peoples shall be conversant with the installed fire fighting equipment of the building so that they can operate the same in case of exigency.

v) Arrangement shall be made for regular checking, testing and proper maintenance of all fire fighting equipment and keep them in good working condition at all time it should be written in the Register.

vii) Good house keeping should be maintained.

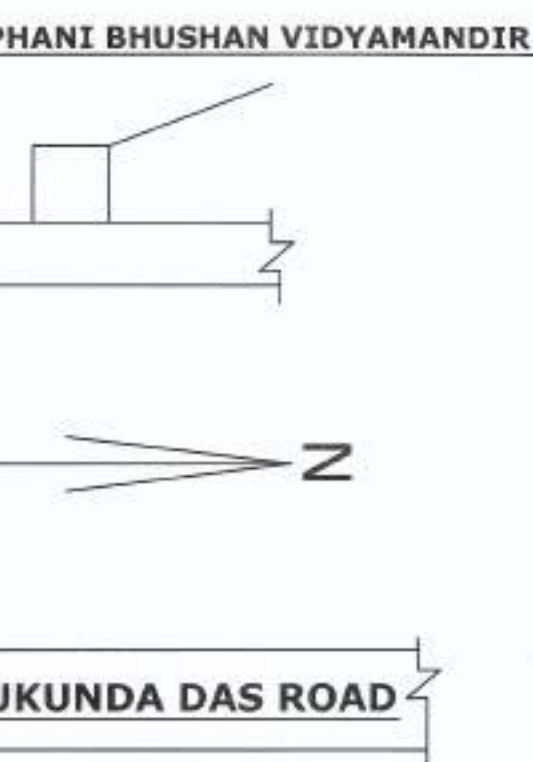
The fire Safety recommendations are issued subject to the free from any court case or legal re-encumbrances. On Compliance of all the fire and life safety recommendation authority of this department approached for necessary inspection and testing of the installation.

Fire Safety Certificate in favour of the occupancy shall be issued on being satisfied with the test and safety performance of safety aspects of the installation of the building

Signature Not Verified
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PANDEY
Date: 2022.05.26 12:06:49 IST

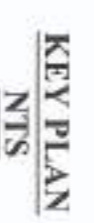
Deputy Director
West Bengal Fire & Emergency Services

Notion



The plan is presently approved to the changes as marked and on compliance of Recommendation F S C will be issued

Divisional Fire Officer
Darfeeling Division &
Member-Convenor T.E.C (N.B)
MBF&ES



All dimensions in millimetre.
All External & internal walls 125 Th, unless otherwise
Only written dimensions to be followed.
General specifications for materials & workmanship as per NBC 199
Grade of concrete M25 & that of steel Fe500

GROUND FLOOR :
STARLIFT AREA : 21.97 SQM
PARKING AREA : 247.84 SQM
TOTAL : 269.81 SQM

FIRST SECOND THIRD FOURTH FLOOR (EACH)
STARLIFT/PASSAGE AREA : 21.97 SQM
RESIDENTIAL AREA : 247.84 SQM
TOTAL : 269.81 SQM

TOTAL RESIDENTIAL AREA FOR FAR/PARKING
CALCULATION : 1279.96 SQM

Sanjuan Albino

SIGNATURE OF OWNERS

SIGNATURE OF _____

