

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI
HEADQUARTERS: DELHI FIRE SERVICE: NEW DELHI - 110 001

No. F.6/DFS/MS/Assembly/(UG)/SZ/2018/ 1577

Dated: 29/6/18

FIRE SAFETY CERTIFICATE

Certified that the **South Extension Underground Metro Station of Line-7**, comprising of Four levels (Undercroft, Platform, Concourse & Ground Level) was inspected by the officer concerned of this department on 26/06/2018 in the presence of Mr. Mr. Rajeev Saxena [Dy. CE (E&M)] and found that the said Metro Station building have deemed complied with the fire prevention and fire safety requirements in accordance with rule 33 of the Delhi Fire Service Rules, 2010 and that the premise (*excluding Property Development area*) is fit for occupancy class "**Group D-7 Assembly building**" with effect from ~~28/6~~ 29/6/2018 for a period of **three years** in accordance with rule 36 unless renewed under rule 37 or sooner cancelled under Rule 40 and subject to compliance of the conditions under rule-38 of the Delhi Fire Service Rules, 2010.

Issued on.....29.6.18.....at New Delhi by.


(Vipin Kental)
Chief Fire Officer
Tel: 011-23412225

Copy to:-

1. The Sh. A. K. Singh, Executive Director/Electrical, Near Malviya Nagar Metro Station, Press Enclave Road, New Delhi-110017
2. Director Works, Metro Bhawan, Fire Brigade Lane, Barakhamba Road, New Delhi-110001

Conditions for the validity of fire safety certificate:

1. All the means of escape/entry/exit shall be kept free from any obstruction.
2. All the fire safety arrangements provided therein shall be maintained in good working condition at all time as seen during inspection. Any loss of life or property due to non-functional fire safety measures shall be at the responsibility of the management.
3. All the staff members must know the correct method of operation of firefighting system.
4. The owner/ occupier shall submit a declaration **every year** in **Form 'K'** provided in the first schedule of Delhi Fire Service Rules 2010. The form is available on http://delhi.gov.in/wps/wcm/connect/doit_fire/FIRE/Home/Forms
5. This fire safety certificate may not in any way be treated as regularization (Clause 2.8 of UBBL-2016) of unauthorized construction or Alteration (Clause 1.4.3 of UBBL-2016), if any.
6. "The owner/occupier shall apply for renewal of this Fire Safety Certificate to the Director in **Form 'J'** [sub rule (1) of rule 37] along with a copy of this Certificate, **six months** prior to its expiry."
7. *The Property Development area shall not be occupied by DMRC prior to its clearance by this department.*

INSPECTION REPORT

1. Name & address of the building : South Extension Underground Metro Station of Line-7
 2. Type of Occupancy : Assembly- Group-"D"
 3. Type of Case : New
 4. Details of Previous NOC : NA
 5. Fire Safety directives letter No : F6/DFS/MS/2013/Metro/1604 dated 14/06/2013
 6. Date of inspection : 26/06/2018
 7. Name of Inspecting Officer : A. K. Malik
 8. Name and designation of officer from the building side : Mr. Rajeev Saxena [Dy. CE (E&M)]
 9. Year of Construction : 2018 [Undercroft + Platform + Concourse + Ground Floor]
 10. Applicant's letter No. : Form 'I' & outdoor diary no. 8995 dated 20/06/2018

| S. No. | Minimum Standards on fire prevention and fire safety U/R 33 | NFPA Requirement | Provided at site | Remarks MR/NMR |
|--------|---|---|---|---|
| 1. | Access to building | | | |
| | <ul style="list-style-type: none"> • Road width • Gate width • Width of internal road | Required NA Approachable | 12m NA Abut on Road | MR NA MR |
| 2. | Number, Width, Type & Arrangement of Exits | | | |
| | a. Number of staircases | -NA- | -NA- | -NA- |
| | <ul style="list-style-type: none"> • Upper Floors | 1. Undercroft to Platform- 2 Nos | Provided | MR (50% capacity of Escalators is counted for evacuation in NFPA) |
| | <ul style="list-style-type: none"> • Basements | 2. Platform to Concourse-5 Nos + 2 Escalator | | |
| | | 3. Concourse to Ground-5 Nos + 5 Escalator | | |
| | b. Width of staircases | -NA- | -NA- | -NA- |
| | <ul style="list-style-type: none"> • Upper Floor | 1.12m & 0.91m (maintenance staircase) | 1. 1.2m & 1.2m | MR (Based on evacuation calculation submitted by DMRC as per NFPA) |
| | <ul style="list-style-type: none"> • Basements | | 2. 3.68m, 3.65m, 1.25m, 1.25m & 1m + 1m x 2 Nos | |
| | | 3. 3.6m, 3.6m, 3.6m, 3.3m & 1m + 1m x 5 Nos | | |
| | c. Protection of exits | Required | Provided | MR |
| | <ul style="list-style-type: none"> • Fire check door • Pressurization | Required in Fireman Staircase & Emergency Staircase | Provided. | MR |
| | d. No. of continuous staircases to terrace | -NA- | -NA- | -NA- |
| | e. Width of Corridor | 0.91m | 1m | MR |
| | f. Door Size | 0.91m | 1m | MR |
| 3. | Compartmentation | | | |
| | <ul style="list-style-type: none"> • Fire check door • Sealing of electrical shafts • Fire Rating of shaft door • Water Curtain • Fire Dampers | Required | Provided | MR |
| | | Required | Provided | MR |
| | | 30minute & 3 Hours | Provided | MR |
| | | -NA- | -NA- | -NA- |
| 4. | Smoke Management System | Required | Provided | MR |

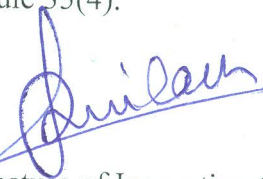
| | | | | |
|-----|---|---|--|--|
| | <ul style="list-style-type: none"> Upper floors | -NA- | -NA- | -NA- |
| 5. | Fire Extinguishers | | | |
| | <ul style="list-style-type: none"> Total numbers Types IS marking | 98 No's ABC/W.CO2/CO2 ISI marked | 98 No's 27/06/65 Yes | MR MR MR |
| 6. | First-Aid Hose Reels | | | |
| | <ul style="list-style-type: none"> Total numbers on each floor Length of hose reel hose Nozzle diameter | 2 No. in ancillary building, 1 No. in S&T room corridor, 12 Nos at Concourse & 8 Nos at each Platform 36m 6mm | Provided Provided Provided | MR MR MR |
| 7. | Automatic fire detection and alarming system | | | |
| | <ul style="list-style-type: none"> Type of detectors Location of Main Panel Location of Repeater Panel Alternate source of power Hooters' Location | Smoke & Heat Station Control Room Required Required All Area | Provided Provided Fireman Staircase Provided Provided | MR MR MR MR MR |
| 8. | MOEFA | Required | Provided | MR |
| 9. | Public Address System | Required | Provided | MR |
| 10. | Automatic Sprinkler System | Required | Provided | MR |
| | <ul style="list-style-type: none"> Basement Ground & Above Floor Sprinkler above false ceiling | Required in following rooms:- mess, store, security, locker -NA- -NA- | Provided -NA- -NA- | MR -NA- -NA- |
| 11. | Internal Hydrants | | | |
| | <ul style="list-style-type: none"> Size of riser/down-comer Number of hydrants per floor Hose Box | 150mm 2 No. in ancillary building, 1 No. in S&T room corridor, 12 Nos at Concourse & 8 Nos at each Platform 2 No. in ancillary building, 1 No. in S&T room corridor, 12 Nos at Concourse & 8 Nos at each Platform | Provided Provided Provided | MR MR MR |
| 12. | Yard Hydrants | | | |
| | <ul style="list-style-type: none"> Total number of hydrants Hose Box | 1 Nos 1 Nos at ancillary building & 1 Nos at each tunnel portal | Provided Provided | MR MR |
| 13. | Pumping Arrangements | | | |
| | <ul style="list-style-type: none"> Ground Level Discharge of main Pump Head of Main pump Number of main pumps Jockey Pump out put Jockey pump head Standby Pump out put Standby Pump Head Auto Starting/Manual Stopping Pump House Access | 2839 LPM 88m for Hydrant & 75m for Sprinkler Two 2 x 189 LPM 88m for Hydrant & 75m for Sprinkler 2 x 2839 LPM(electric) 88m for Hydrant & 75m for Sprinkler Required | Provided Provided Provided Provided Provided Provided Provided | MR MR MR MR MR MR MR |

| | | | | |
|-----|---|---|--|------|
| | <ul style="list-style-type: none"> ➤ Discharge of pump ➤ Head of the pump ➤ Power Supply ➤ Auto Starting of pump | -NA- | -NA- | -NA- |
| | | -NA- | -NA- | -NA- |
| | | -NA- | -NA- | -NA- |
| | | -NA- | -NA- | -NA- |
| 14. | Captive Water Storage for fire fighting | | | |
| | <ul style="list-style-type: none"> • Underground tank capacity ➤ Draw-off connection ➤ Fire service inlet ➤ Access to tank • Overhead Tank capacity | -NA- | -NA- | -NA- |
| | | Required | Provided | MR |
| | | Required | Provided | MR |
| | | Required | Provided | MR |
| | | 2 x 1,00,000 Lts | Provided | MR |
| 15. | Exit Signage. | Required | Provided | MR |
| 16. | Provision of Lifts. | | | |
| | <ul style="list-style-type: none"> • Pressurization of Lift Shaft • Pressurization of Lift lobby • Communication In lift Car • Fireman's Grounding Switch • Lift Signage | -NA- | -NA- | -NA- |
| | | -NA- | -NA- | -NA- |
| | | Required | Provided | MR |
| | | Required | Provided | MR |
| | | Required | Provided | MR |
| 17. | Standby power supply | Required | Provided | MR |
| 18. | Refuge Area. | | | |
| | <ul style="list-style-type: none"> ➤ Total Area ➤ Location | -NA- | -NA- | -NA- |
| | | -NA- | -NA- | -NA- |
| 19. | Fire Control Room | | | |
| | <ul style="list-style-type: none"> • Detector System Panel • Flow Switch Panel • PA System Panel • Batter backup • Building Floor Plans | Required in SCR | Provided | MR |
| | | Required | Provided | MR |
| | | Required | Provided | MR |
| | | Required | Provided | MR |
| | | Required | Provided | MR |
| 20. | Special Fire Protection System for Protection of special Risks, if any: | Clean Agent flooding system for Electrical Panels & Transformer | Provided local application with NOVEC 1230 | MR |

The fire protection systems provided in the building were randomly tested, checked and found functional at the time of inspection.


Keeping in view of the above compliance of the minimum standards of fire prevention and fire safety measures as required under the rule 35 of the Delhi Fire Service Rules 2010, Fire Safety Certificate is recommended under rule 35(3).

Accordingly form "H" in shape of DFA is put up for approval under rule 35(4).


 Signature of Inspecting Officer
 Name: A. K. Malik
 Designation: DO (SD)

Dy. CFO (SZ)




 27/6
 FT/102