

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

No. F.6/DFS/MS/Assembly/(UG)/SZ/2018/ 22-2

Dated: 21/02/2018

## FIRE SAFETY CERTIFICATE

Certified that the IIT Underground Metro Station of Line-8, comprising of Four levels (Undercroft, Platform, Concourse, & Ground Level) was inspected by the officer concerned of this department on 09/02/2018 in the presence of Mr. Lovleen (Dy. CEE) 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 premises is fit for occupancy class "Group D-7 Assembly building" with effect from -21/2018 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.

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

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Copy to:-

- 1. The Sh. A. K. Garg, Executive Director/Electrical, Near Malviya Nagar Metro Station, Press Enclave Road, New Delhi-110017.
- 2. Director Projects, 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."

111 Underground Metro Station of Line-8 INSPECTION REPORT 1. Name & address of the building : IIT Underground Metro Station of Line-8 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/2013/2315 dated 25/09/2013 6. Date of inspection : 09/02/2018 7. Name of Inspecting Officer : A. K. Malik 8. Name and designation of officer from the building side : Mr. Lovleen (Dy. CEE) 9. Year of Construction  $[Undercroft + Platform + Concourse + Ground\ Floor] \\$ : 2017 Applicant's letter No. : Outdoor diary no. 1140 & 1514 of 23 & 31/01/2018 respectively. S. No. Minimum Standards on fire prevention **NFPA** Provided at site Remarks and fire safety U/R 33 Requirement MR/NMR Access to building Road width Required 10m MR Gate width NA 6m NA Width of internal road Approachable Abut on Road MR Number, Width, Type & Arrangement of Exits a. Number of staircases Upper Floors NA NA NA 1. Undercroft to MR Platform- 2 Nos (50% capacity Platform of Escalators Provided Concourse-4 Nos Basements is counted for +2 Escalator evacuation in 3. Concourse to NFPA) Ground-3 Nos + 3 Escalator b. Width of staircases Upper Floor NA NA NA 1. 1.5m x 2 Nos 2. 3m x 2 Nos,  $4.2m \times 2 Nos +$ Basements 2.8m & 1.2m 1m x 2 Nos (maintenance 3. 3.7m x 2 Nos, MR staircase)  $3.3 \text{m} \times 1 \text{Nos} +$ 1m x 3 Nos c. Protection of exits Fire check door Required Provided. MR Required in Fireman Staircase Pressurization & Emergency Provided. MR Staircase No. of continuous staircases to terrace Ancillary Building Provided (1.25m) MR Width of Corridor 0.91m 1m MR Door Size 0.91m 1 m MR Compartmentation Fire check door Required Provided MR Sealing of electrical shafts Required Provided MR Fire Rating of shaft door 30minute & 3 Hours Provided MR Water Curtain NA NA NA

Required

Provided

MR

10.

1.

2.

3.

4.

Fire Dampers

Smoke Management System

5.	Fire Extinguishers	A 34 A	11/1	
	Total numbers	100 No's	103 No's	MR
579	Types	ABC/W.CO2/CO2	36/3/64	MR
	IS marking	ISI marked	Yes	MR
6.	First-Aid Hose Reels		103	17110
	Total numbers on each floor	1 No. in ancillary		
	Total numbers on each floor	building, 15 Nos at	Provided	MR
		Concourse & 9 Nos at each Platform	110114	
	<ul> <li>Length of hose reel hose</li> </ul>	30m	Provided	MR
	<ul> <li>Nozzle diameter</li> </ul>	6mm	Provided	MR
7.	Automatic fire detection and alarming system	aconvolution of	1101100	11111
	Type of detectors	Smoke & Heat	Provided	MR
	<ul> <li>Location of Main Panel</li> </ul>	Station Control Room	Provided	MR
	Location of Repeater Panel	Required	Fireman Staircas	The state of the s
	Alternate source of power	Required	Provided	MR
_	Hooters' Location	All Area	Provided	MR
8.	MOEFA	Required	Provided	MR
9.	Public Address System	Required	Provided	MR
10.	Automatic Sprinkler System	Required	Troylded	IVIIC
		Required in	The state of the s	
	Basement	following rooms:-	Provided	MR
_	Dasement	mess, store,	Tiovided	IVIK
		security, locker		
	Ground & Above Floor	NA NA	NA	NA
	Sprinkler above false ceiling	NA	NA	NA
11.	Internal Hydrants	101	1471	1471
***	Size of riser/down-comer	150mm	Provided	MR
	Size of fisch/down-comer	1 No. in ancillary	TTOVIGE	1411
	Number of hydrants per floor	building, 15 Nos at	Provided	MR
	ramoer of figurants per floor	Concourse & 9 Nos at	riovided	IVIK
		each Platform  1 No. in ancillary		
	Hose Box	building, 15 Nos at		140
		Concourse & 9 Nos at	Provided	MR
	A Stand	each Platform		
12.	Yard Hydrants			
	<ul> <li>Total number of hydrants</li> </ul>	2 Nos	Provided	MR
		2 Nos at ancillary		
	Hose Box	building & 1 Nos at	Provided	MR
13.	Pumping Arrangements	each tunnel portal		
10.	Ground Level			
4		2020 I DN4	Provided	MD
	Discharge of main Pump	2839 LPM		MR
	Head of Main pump	75m for Hydrant & 56m for Sprinkler	Provided	MR
	No. 1	Two **	Provided	MR
	Number of main pumps	2 x 189 LPM	Provided	MR
	> Jockey Pump out put	75m for Hydrant &	Provided	MR
-	> Jockey pump head	56m for Sprinkler	TTOVICE	IVIIX
		2 x 2839	Provided	MR
	Standby Pump out put	LPM(electric)		
		75m for Hydrant &	Provided	MR
	Standby Pump Head	56m for Sprinkler		
1	Auto Starting/Manual Stopping	Required	Provided	MR
				MAD
	Pump House Access	Required	Provided	MR
	<ul> <li>Pump House Access</li> <li>Terrace level</li> <li>Discharge of pump</li> </ul>	Required	Provided	MR

			1 /		
T	Underground	Metro	Station	of Line-8	

	IIT Underground Meti	o Station of Line-8						
	Head of the pump	NA	NA	NA				
	Power Supply	NA	NA	NA				
	<ul><li>Auto Starting of pump</li></ul>	NA	NA	NA				
4.	Captive Water Storage for fire fighting							
	Underground tank capacity	NA	NA	NA				
	> Draw-off connection	Required	Provided	MR				
	Fire service inlet	Required	Provided	MR				
	<ul><li>Access to tank</li><li>Overhead Tank capacity</li></ul>	Required	Provided	MR				
		2 x 1,00,000 Lts	Provided	MR				
5.	Exit Signage.	Required	Provided	MR				
16.	Provision of Lifts.							
	Pressurization of Lift Shaft	NA	NA	NA				
	Pressurization of Lift lobby	NA	NA	NA				
	Communication In lift Car	Required	Provided	MR				
	<ul><li>Fireman's Grounding Switch</li><li>Lift Signage</li></ul>	Required	Provided	MR				
		Required	Provided	MR				
17.	Standby power supply	Required	Provided	MR				
18.	Refuge Area.							
	> Total Area	NA	NA	NA				
	> Location	NA	NA	NA				
19.	Fire Control Room	No. of the second		. 1,				
	Detector System Panel	Required in SCR	Provided	MR				
	<ul> <li>Flow Switch Panel</li> </ul>	Required	Provided	MR				
	PA System Panel	Required	Provided	MR				
	<ul><li>Batter backup</li><li>Building Floor Plans</li></ul>	Required	Provided	MR				
		Required	Provided	MR				
20.		Clean Agent						
	Special Fire Protection System for	flooding system	Provided	MR				
	Protection of special Risks, if any:	for Electrical						
	1	Panels &						
	2.7	Transformer						

Some of the shortcomings communicated vide letter no. F6/DFS/MS/Assembly/SZ/2018/44 dated 03/01/2018 are duly complied and for other DMRC outdoor diary letter no. 1140 & 1514 dated 23/01/2018 & 31/01/2018 respectively, submitted the relevant provisions of NFPA and same may be accepted by the competent authority. 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.

Accordingly form "H" in shape of DFA is put up for approval and signature.

Accordingly DFA is put up for approval and signature

Signature of Inspecting Officer

Name: A. K. Malik Designation: DO (SD)