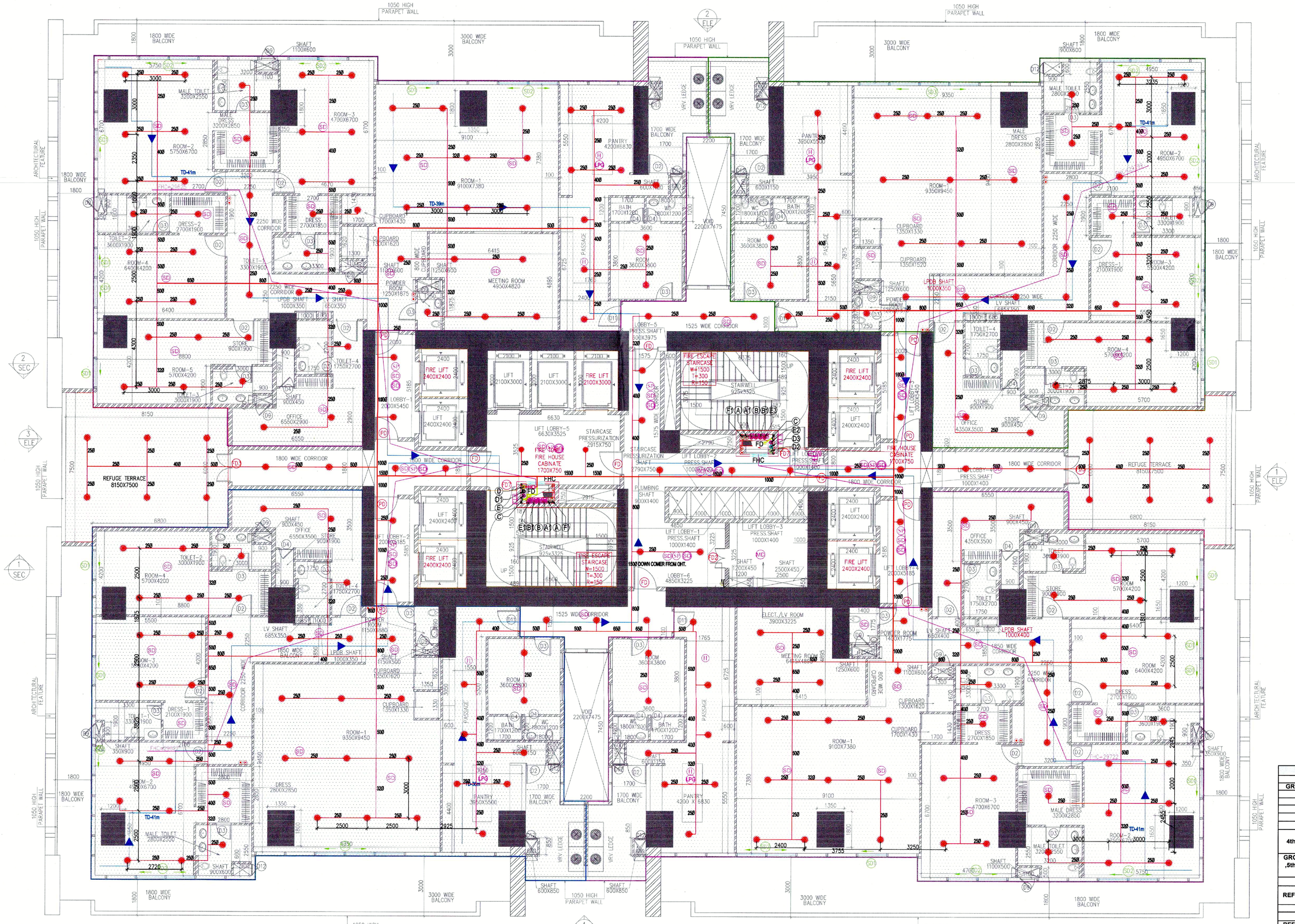


TYPICAL (4th,8th,12th,16th & 19th) REFUGE FLOOR PLAN
(TOWER-EAST)
SERVICE APARTMENT

FLOOR	LVL	NO. STEPS	TOTAL NO. STEPS
4th	+24350	160-187	27
8th	+40550	270-297	27
12 th	+56750	380-406	27
16 th	+72950	489-515	27
19 th	+85100	570-596	27

Tower 4 To A Core: Calculation of Refuge area

Gross Floor Area of Refuge&Floor Above Refuge = 4184 Sqm.

As per NBC Part 4 Clause 4.3, per person floor 12.5sqm per person is considered.

Gross Occupant Load = 335 Pax. (Calculated as 4184/12.5 sqm)

As per NBC Clause E-4(d), per person refuge area needs to be calculated based on 0.3 sqm per person.

Refuge Area Required at 5th Floor=335 x 0.3 Sqm/Person + 0.9 Sqm (0.9 Sqm/200 occupants for wheelchair space)

Refuge Area Required = 98.108 sqm.

Refuge Area Provided= 101.850 sqm.

FIRE FIGHTING LEGEND:-

A	150Ø FIRE RISER FOR LOW ZONE-01
A1	150Ø FIRE RISER FOR LOW ZONE-02
B	150Ø FIRE RISER FOR MID ZONE-01
B1	150Ø FIRE RISER FOR MID ZONE-02
C	80Ø DRAIN PIPE
D	150Ø SPRINKLER RISER FOR LOW ZONE-01
D1	150Ø SPRINKLER RISER FOR LOW ZONE-02
E	150Ø SPRINKLER RISER FOR MID ZONE-01
E1	150Ø SPRINKLER RISER FOR MID ZONE-02
D2	150Ø STANDBY SPRINKLER RISER FOR LOW ZONE-01
D3	150Ø STANDBY SPRINKLER RISER FOR LOW ZONE-02
E2	150Ø STANDBY SPRINKLER RISER FOR MID ZONE-01
E3	150Ø STANDBY SPRINKLER RISER FOR MID ZONE-02
F	100Ø FIRE CHT FILLING EXPRESS FEED RISER
F1	100Ø STANDBY FIRE CHT FILLING EXPRESS FEED RISER
FHC	FIRE HOSE CABINET
FS	FLOW SWITCH
BFV	BUTTERFLY VALVE
	PENDENT TYPE SPRINKLER
	UPRIGHT TYPE SPRINKLER
	NORMAL SIDE WALL TYPE SPRINKLER
CO2	TYPE FIRE EXT. (6.5KG)
ABC	TYPE FIRE EXT. (5.0KG)

NO. OF SPRINKLER	DIA OF PIPE
1-2	25Ø
3	32Ø
4-6	40Ø
6-10	50Ø
11-18	65Ø
19-40	80Ø
41-100	100Ø
101-ABOVE	150Ø

NOTE
EACH FIRE HOSE CABINET SHALL CONSIST OF
1 NO. - ISI MATERIAL SINGLE HEADED HYDRANT VALVE (63mm)
2 Nos. - FIRE HOSES-63mm 15M LONG WITH ACCESSORIES.
1 No. - SHORT BRANCH PIPE
1 No. - FIRST AID HOSE REEL

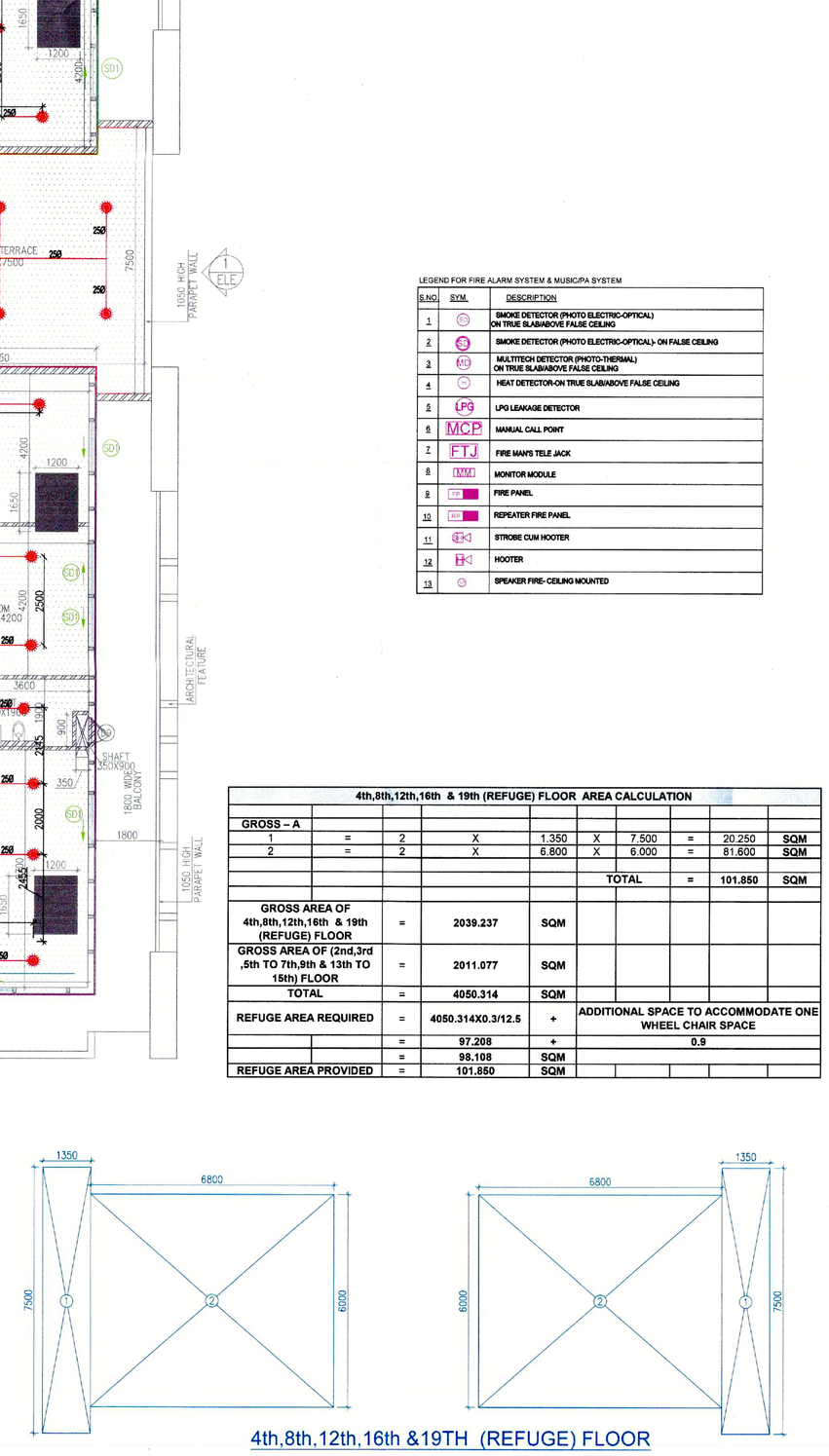
SCHEDULE OF JOINERY

ITEM NO	TAG	DETAILS	SIZE WIDTH	SIZE HEIGHT	LOCATION
1	FD	120 MIN FIRE RATED HDF HARDWOOD DOOR	1100	2400	REFUGE ENTRY DOOR
2	FD1	60 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2400	ALL MAIN ENTRY DOOR (REFUGE FLOOR)
3	FD2	60 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2100	ELECTRIC SHAFT
4	FD11	60 MIN FIRE RATED HDF HARDWOOD DOOR	1000	2100	SERVICE SHAFT
5	FD7	FIRE DOOR	1100	2400	STAIRCASE DOOR-PERFORATED DOOR
6	D	ALUMINIUM GLAZED DOOR	1200	2400	BALCONY DOOR
7	D1	HDF HARDWOOD DOOR	1200	2400	ENTRY DOOR
8	D2	HDF HARDWOOD DOOR	1000	2400	BEDROOM DOORS
9	D3	HDF HARDWOOD DOOR	850	2400	KITCHEN DOORS/TOILET DOOR
10	D4	HDF HARDWOOD DOOR	750	2400	UTILITY/BALCONY/TOILET DOORS
11	D5	SLIDING HDF HARDWOOD DOOR	650	2400	CARETAKER ROOM TOILET
12	D6	MS GLASS DOOR	900	2400	FHCs
13	D8	HDF HARDWOOD DOOR	1200	2400	MACHINE ROOM TERRACE
14	D9	HDF HARDWOOD DOOR	750	2100	PLUMBING SHAFT
15	D10	HDF HARDWOOD DOOR	1000	2400	HANDICAP TOILET (STILT)
16	D11	ALUMINIUM DOOR	1000	2400	KITCHEN DOOR (OPENING IN BALCONY)
17	D12	HDF HARDWOOD DOOR	600	2100	SHAFT DOOR
18	FD	60 MIN FIRE RATED HDF HARDWOOD DOOR	1000	2400	PRIVATE LIFT LOBBY
19	SD1	ALUMINUM GLAZED SLIDING DOOR	1500	2700	BALCONY DOOR
20	SD2	ALUMINUM GLAZED SLIDING DOOR	3000	2700	BALCONY DOOR
21	SD3	ALUMINUM GLAZED SLIDING DOOR	6000	2700	BALCONY DOOR

LEGEND FOR FIRE ALARM SYSTEM & MUSIC/PA SYSTEM

S.NO	SYM.	DESCRIPTION
1		SMOKE DETECTOR (PHOTO ELECTRIC-OPTICAL) ON TRUE SLABVABOVE FALSE CEILING
2	S	SMOKE DETECTOR (PHOTO ELECTRIC-OPTICAL)- ON FALSE CEILING
3	M	MULTITECH DETECTOR (PHOTO-THERMAL) ON TRUE SLABVABOVE FALSE CEILING
4		HEAT DETECTOR-ON TRUE SLABVABOVE FALSE CEILING
5	LPG	LPG LEAKAGE DETECTOR
6	MCP	MANUAL CALL POINT
7	FTJ	FIRE MAN'S TELE JACK
8	MM	MONITOR MODULE
9		FIRE PANEL
10		REPEATER FIRE PANEL
11		STROBE CUM HOOTER
12		HOOTER
13		SPEAKER FIRE- CEILING MOUNTED

4th,8th,12th,16th & 19th (REFUGE) FLOOR AREA CALCULATION									
GROSS – A									
1	=	2	X	1.350	X	7.500	=	20.250	SQM
2	=	2	X	6.800	X	6.000	=	81.600	SQM
					TOTAL		=	101.850	SQM
GROSS AREA OF 4th,8th,12th,16th & 19th (REFUGE) FLOOR	=	2039.237	SQM						
GROSS AREA OF (2nd,3rd ,5th TO 7th,9th & 13th TO 15th) FLOOR	=	2011.077	SQM						
TOTAL	=	4050.314	SQM						
REFUGE AREA REQUIRED	=	4050.314X0.3/12.5	+	ADDITIONAL SPACE TO ACCOMMODATE ONE WHEEL CHAIR SPACE					
	=	97.208	+	0.9					
	=	98.108	SQM						
REFUGE AREA PROVIDED	=	101.850	SQM						



4th,8th,12th,16th &19TH (REFUGE) FLOOR

Note :-

1. BUILDING WILL BE DESIGNED (STRUCTURES) AS PER RELEVANT IS CODES FOR EARTH QUAKE RESISTANCE.

PROJECT

REVISED BUILDING PLANS OF COMMERCIAL COLONY(TOD) MEASURING 17.4875 ACRES (LICENCE NO. 240 OF 2007 DATED 25.10.2007) AND 6.99025 ACRES (LICENCE NO. 239 OF 2007 DATED 25.10.2007, LICENCE NO. 241 OF 2007 DATED 25.10.2007 & LICENCE NO. 199 OF 2008 DATED 8.12.2008) TOTALLING **24.47775 ACRES** IN SECTOR-62, GURUGRAM MANESAR URBAN COMPLEX BEING DEVELOPED BY PIONEER URBAN LAND & INFRASTRUCTURE LTD.

CLIENT

PIONEER URBAN LAND & INFRASTRUCTURE LTD.

Pioneer Urban
Ground Floor
Near GOLF Course Extension Road,
Sector-62,
Gurugram -122001 Haryana

DESIGN ARCHITECT

RSP
RSP Design consultants (India) Pvt. Ltd.
103, First Floor, Bestech Business Tower, Sector: 48, Sohna Road Gurgaon, 122018, India TEL: 4706868 FAX: 4706818
HEAD OFFICE:NO.30, MUSEUM ROAD, BANGALORE-560 001
TEL: 25596868 FAX:25596818
EMAIL: rsp@rspindia.net ; www.rspindia.net

ASSOCIATE ARCHITECT

RSMS ARCHITECTS
RSMS ARCHITECTS PVT. LTD.
69,Nora Niwas Bhawani Kunj
(Behind D2), Vasant Kunj,
New Delhi-110070.
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www.rsms-arch.com

MEP CONSULTANT:

SUNIL NAYYAR CONSULTING ENGINEERS LLP
206-206A, 2ND FLOOR, TIME CENTRE, DLF GOLF COURSE ROAD, SECTOR-54, GURGAON-122002, HARYANA (INDIA)
URL:\\ www.snc.co.in

FIRE SUBMISSION

Lead Architect Town Planners
Registration Branch
RSP
Gurugram

Fire Fighting Scheme
Vide Letter No. RS 2025/1372
Dated 11/6/2025
Joint Director (Fire)

IT IS CERTIFIED THAT THESE DRAWING ARE AS PER APPROVED DWG BY STP (CHAIRMAN,BUILDING PLAN APPROVAL COMMITTEE) GURUGRAM HARYANA
VIDE MEMO NO. ZP-338-II/PA(DK)/2025/31457 DATED: 13-08-2025

ARCHITECT'S SEAL & SIGNATURE	OWNER'S SEAL & SIGNATURE

APRIL.-2025 | Scale : 1:100

Drawing Title:-
TYPICAL(4th,8TH,12TH,16TH & 19th) FLOOR PLAN & FIRE FIGHTING LAYOUT (TOWER EAST)

Drawing No:-
SNC-FF-3A-04
28082024-3