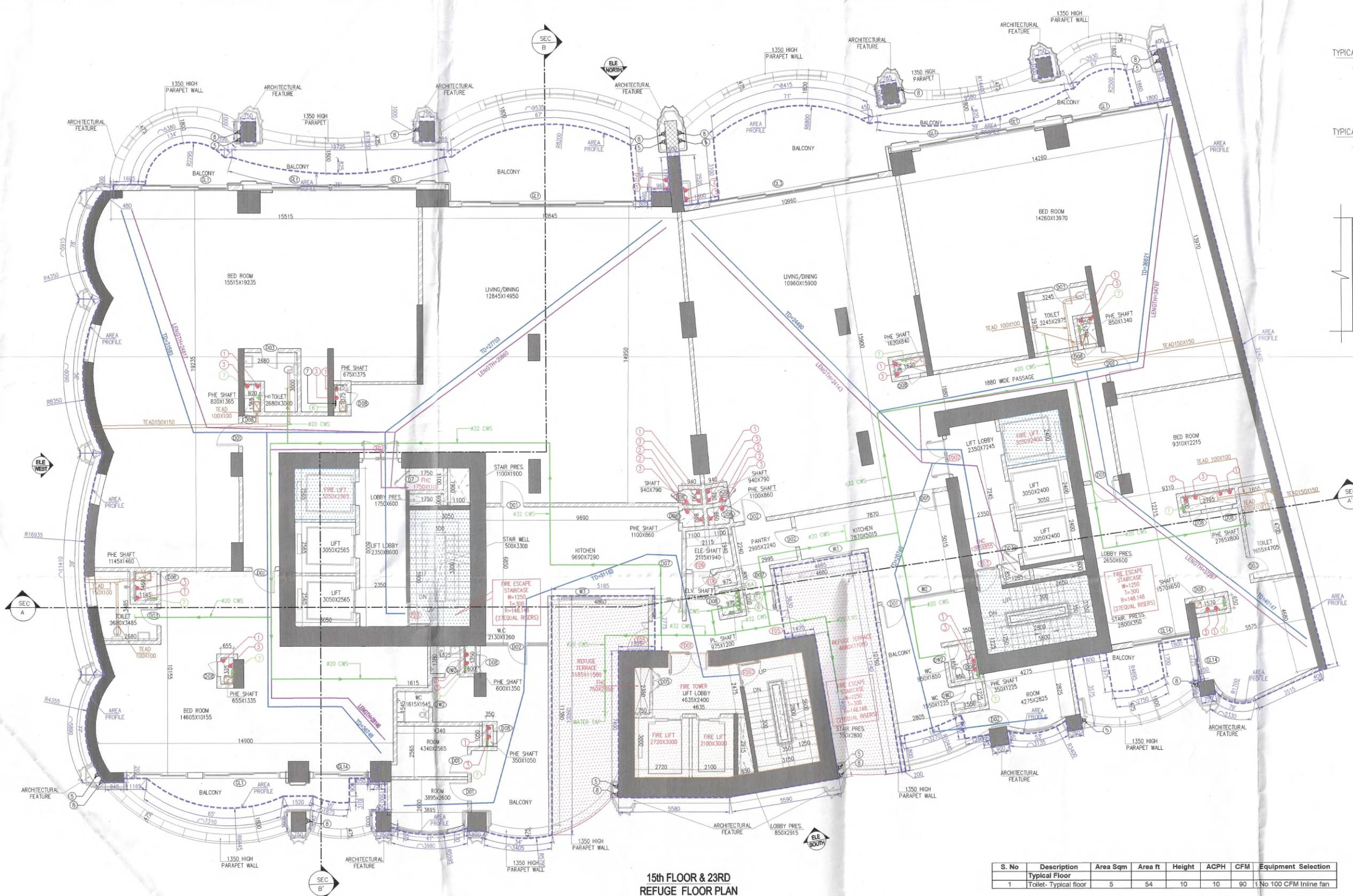


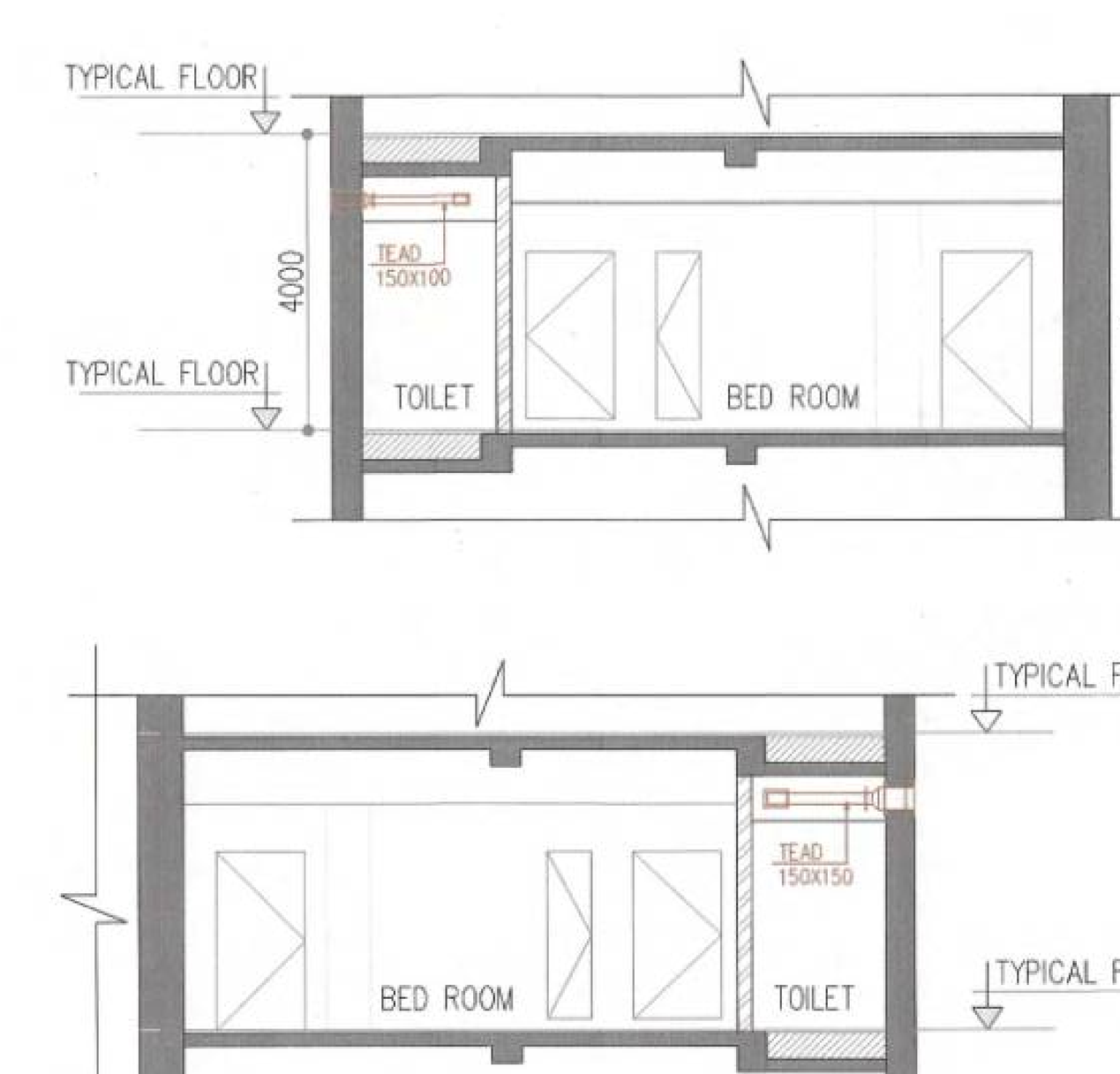
15th FLOOR & 23RD REFUGE FLOOR PLAN
TOWER-1

S. No	Description	Area Sqm	Area ft	Height	ACPH	CFM	Equipment Selection
	Typical Floor						
1	Toilet- Typical floor	5	54	10	10	90	1 No 100 CFM Inline fan

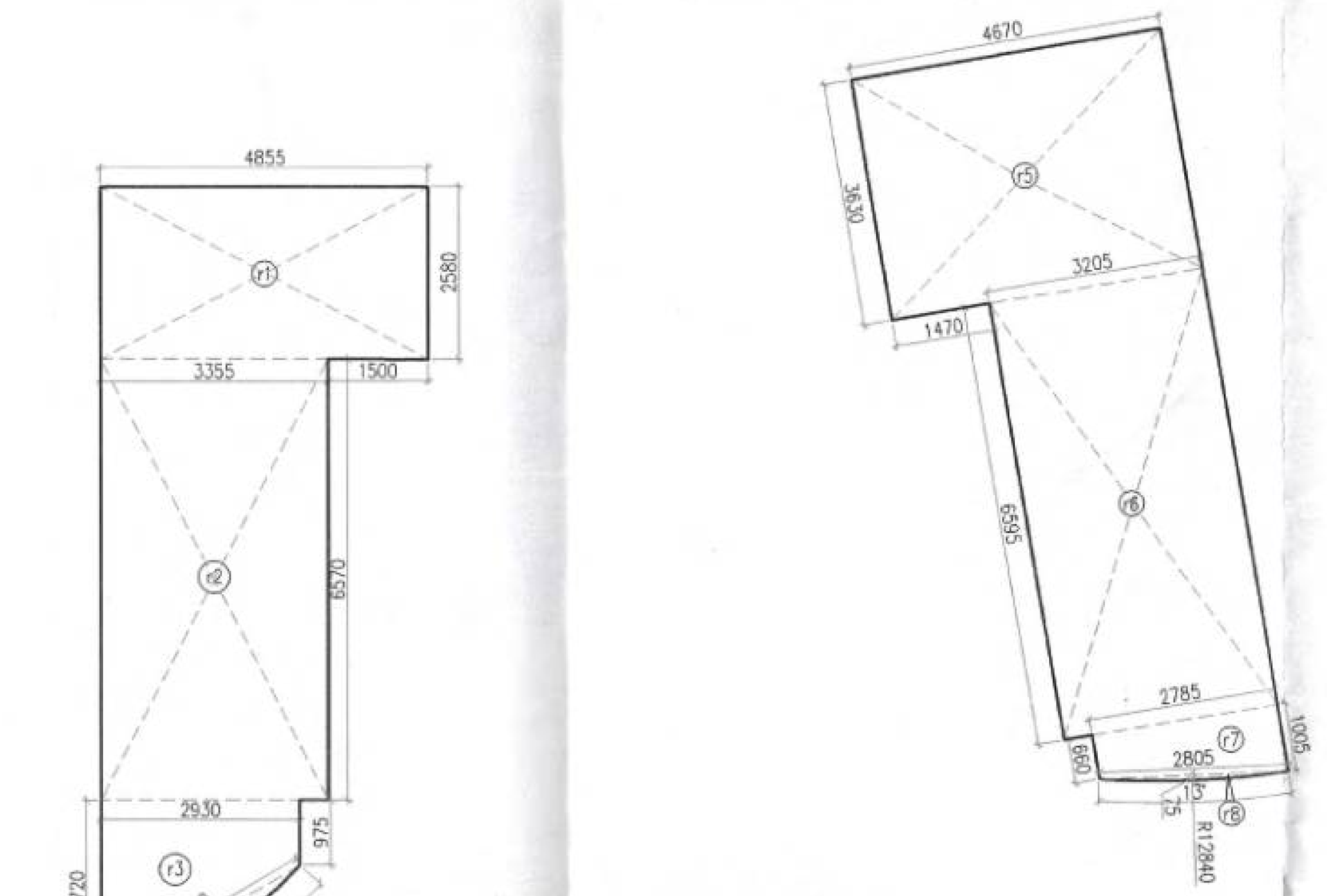
FLOOR	FLOOR LEVEL	UNITS
15th FLOOR(Refuge)	LVL+64.800	2
23rd FLOOR(Refuge)	LVL+96.800	2
TOTAL UNITS	=	04



REFUGE (15th & 23RD) FLOOR
TOWER-1



TYPICAL FLOOR



REFUGE AREA CALCULATION

HVAC LEGEND : - TOILET EXHAUST DUCT

15TH & 23RD REFUGE FLOOR AREA CALCULATION(TOWER-1)								
GROSS – A								
r1	=	1	X	4.855	X	2.580	=	12.526 SQM
r2	=	1	X	3.355	X	7.010	=	23.519 SQM
r3	=	0.5	X	(2.720+0.975)	X	2.930	=	5.413 SQM
r5	=	1	X	4.670	X	3.630	=	16.952 SQM
r6	=	1	X	3.205	X	6.595	=	21.137 SQM
r7	=	0.5	X	(0.660+1.005)	X	2.785	=	2.319 SQM
						TOTAL	=	81.865 SQM
GROSS AREA OF TYPICAL 16TH & 24TH FLOOR (TOWER - 1)	=	1702.274	SQM					
GROSS AREA OF 15TH & 23RD REFUGE FLOOR (TOWER - 1)	=	1605.247	SQM					
TOTAL	=	3307.521	SQM					
REFUGE AREA REQUIRED	=	(3307.521X0.3)/ 12.5	+	ADDITIONAL SPACE TO ACCOMMODATE ONE WHEEL CHAIR SPACE				
	=	79.381	+	0.9				
	=	80.281	SQM					
REFUGE AREA PROVIDED	=	GROSS-A	+	GROSS-B				
	=	81.865	+	0.895	=	82.760	SQM	

ARC AREA	REFUGE AREA CALCULATION																			
GROSS -B																				
r4	3.14	X	5.720	X	5.720	X	35	/	360	-	0.5	X	5.720	-	0.260	X	3.410	=	0.679	SQM
r8	3.14	X	12.840	X	12.840	X	13	/	360	-	0.5	X	12.840	-	0.075	X	2.805	=	0.216	SQM
																TOTAL		=	0.895	SQM

DOOR / WINDOW SCHEDULE (TOWER-1)					
DOOR NAME	SIZE	CILL LVL	LINTEL LVL	LOCATION	FIRE RATED
D01	1200 X 2400		2400	BED ROOM ,KITCHEN & PASSAGE	
D02	1000 X 2400		2400	SERVICE PERSONAL/ROOM	
D03	900 X 2400		2400	TOILETS	
D04	1500 X 2700		2700	KITCHEN , SERVICE PASSAGE	
D05	1200 X 2300	100 MM	2400	FHC	
D06	900 X 2400		2400	ELE. SHAFT	
D07	1200 X 2400		2400	MACHINE ROOM	
D08	600X2300		2400	STAFF TOILET	
D09	800 X 2300	100 MM	2400	ELV. SHAFT	
D10	1000 X 2300	100 MM	2400	FHC	
D11	800 X 2400		2400	SERVANT TOILETS	
FD1	2000 X 2400		2400	SERVICE CORE LIFT LOBBY	2 HRS
FD2	1800 X 2400		2400	PASSANGER LIFT LOBBY	2 HRS
FD3	1200 X 2400		2400	STAIRCASE	2 HRS
FD4	1150 X 2400		2400	REFUGE TERRACE	2 HRS
FD5	1500 X 2700		2700	REFUGE TERRACE	2 HRS
FD6	900 X 2400		2400	ELEC. SHAFT	2 HRS
W1	1200 X 1500	1200 MM	2700	KITCHEN	
W2	2500 X 1500	900 MM	2400	ROOM	
W3	2000 X 900	1800 MM	2700	REFUGE FLOOR	2 HRS
DW1	3975 X 2400		2400	KITCHEN	
DW2	800 X 2800		2400	WC	

GLAZING SCHEDULE UPPER GROUND TO 29TH FLOOR	
GLAZING NAME	SIZE
GL1	4380 X 3050
GL2	8660 X 3050
GL3	2965 X 3050
GL4	1865 X 3050
GL8	3000 X 4000
GL9	5800 X 4000
GL10	6350 X 4000
GL11	2060 X 4000
GL12	12165 X 4000
GL13	6480 X 4000
GL14	1450 X 2750

LEGEND : -	
1	160ø SOIL & WASTE COMBINE PIPE
2	160ø WASTE D/T PIPE
3	160ø ANTISYPHONE PIPE
5	160ø TERRACE RAIN WATER PIPE
6	DOMESTIC WATER SUPPLY DOWNTAKE PIPE
7	FLUSHING WATER SUPPLY DOWNTAKE PIPE
8	160ø BALCONY RAIN WATER PIPE
6A	DOMESTIC WATER SUPPLY RISER PIPE
7A	FLUSHING WATER SUPPLY RISER PIPE
(hatch)	KHURRA 650x650MM

ARC AREA	AREA CALCULATION (ADDITIONAL)																			
GROSS -A1																				
2	3.14	X	2.295	X	2.295	X	134	/	360	-	0.5	X	2.295	-	1.405	X	4.230	=	4.264	SQM
3	3.14	X	4.350	X	4.350	X	78	/	360	-	0.5	X	4.350	-	0.970	X	5.470	=	3.629	SQM
4	3.14	X	8.350	X	8.350	X	56	/	360	-	0.5	X	8.350	-	0.960	X	7.780	=	5.004	SQM
5	3.14	X	16.935	X	16.935	X	39	/	360	-	0.5	X	16.935	-	0.950	X	11.195	=	7.206	SQM
6	3.14	X	4.355	X	4.355	X	77	/	360	-	0.5	X	4.355	-	0.960	X	5.450	=	3.420	SQM
7	3.14	X	6.445	X	6.445	X	65	/	360	-	0.5	X	6.445	-	1.010	X	6.925	=	4.550	SQM
8	3.14	X	3.040	X	3.040	X	35	/	360	-	0.5	X	3.040	-	0.145	X	1.845	=	0.175	SQM
9	3.14	X	5.595	X	5.595	X	41	/	360	-	0.5	X	5.595	-	0.350	X	3.895	=	0.980	SQM
10	3.14	X	5.795	X	5.795	X	34	/	360	-	0.5	X	5.795	-	0.250	X	3.355	=	0.657	SQM
11	3.14	X	10.445	X	10.445	X	18	/	360	-	0.5	X	10.445	-	0.125	X	3.255	=	0.333	SQM
12	3.14	X	3.400	X	3.400	X	53	/	360	-	0.5	X	3.400	-	0.355	X	3.025	=	0.738	SQM
13	3.14	X	4.695	X	4.695	X	34	/	360	-	0.5	X	4.695	-	0.200	X	2.710	=	0.446	SQM
14	3.14	X	1.700	X	1.700	X	79	/	360	-	0.5	X	1.700	-	0.385	X	2.150	=	0.578	SQM
15	3.14	X	2.500	X	2.500	X	67	/	360	-	0.5	X	2.500	-	0.420	X	2.765	=	0.777	SQM
17	3.14	X	6.800	X	6.800	X	71	/	360	-	0.5	X	6.800	-	1.260	X	7.890	=	6.780	SQM
18	3.14	X	8.200	X	8.200	X	68	/	360	-	0.5	X	8.200	-	1.345	X	9.005	=	9.016	SQM
																	TOTAL	=	48.555	SQM

ARC AREA	AREA CALCULATION (ADDITIONAL BUILTUP AREA)																			
GROSS -E																				
m3	3.14	X	6.215	X	6.215	X	38	/	360	-	0.5	X	6.215	-	0.335	X	4.015	=	0.998	SQM
m4	3.14	X	12.245	X	12.245	X	15	/	360	-	0.5	X	12.245	-	0.110	X	3.240	=	0.599	SQM
																	TOTAL	=	1.598	SQM

ARC AREA	AREA CALCULATION (DEDUCTION)																			
GROSS -A2																				
16x	3.14	X	14.400	X	14.400	X	39	/	360	-	0.5	X	14.400	-	0.820	X	9.595	=	5.387	SQM
19x	3.14	X	17.850	X	17.850	X	35	/	360	-	0.5	X	17.850	-	0.825	X	10.725	=	5.972	SQM
																	TOTAL	=	11.359	SQM

REFUGE (15th & 23RD) FLOOR AREA CALCULATION										
GROSS – A										
1	4	X			0.750	X	1.000	=	3.000	SQM
1a	1	X			0.785	X	1.000	=	0.785	SQM
6a	1	X			0.945	X	0.200	=	0.189	SQM
20	0.5	X	11.500	+	15.500	X	1.380	=	18.630	SQM
21	0.5	X	0.480	+	0.630	X	5.465	=	3.033	SQM
22	1	X			17.105	X	5.765	=	98.640	SQM
23	0.5	X	2.240	+	2.825	X	9.225	=	23.162	SQM
24	0.5	X	11.630	+	12.010	X	4.905	=	57.777	SQM
25	0.5	X	22.645	+	22.625	X	18.975	=	429.299	SQM
26	0.5	X	13.435	+	13.375	X	5.250	=	70.176	SQM
27	0.5	X			6.870	X	0.900	=	3.092	SQM
28	1	X			3.345	X	0.900	=	3.011	SQM
29	0.5	X			1.820	X	0.310	=	0.282	SQM
30	1	X			0.750	X	1.000	=	0.750	SQM
31	0.5	X	0.795	+	0.830	X	3.895	=	3.165	SQM
32	1	X			4.195	X	1.500	=	6.293	SQM
33	1	X			0.890	X	2.500	=	2.225	SQM
34	0.5	X	2.500	+	2.685	X	3.350	=	8.685	SQM
35	1	X			9.190	X	5.450	=	50.086	SQM
36	1	X			1.825	X	7.400	=	13.505	SQM
37	1	X			3.755	X	7.980	=	29.965	SQM
38	0.5	X	7.980	+	7.505	X	2.830	=	21.911	SQM
39	0.5	X	1.470	+	2.715	X	7.400	=	15.485	SQM
40	1	X			0.200	X	1.800	=	0.360	SQM
41	0.5	X	2.410	+	1.875	X	3.405	=	7.295	SQM
42	1	X			0.900	X	0.645	=	0.581	SQM
43	0.5	X	3.020	+	3.075	X	5.925	=	18.056	SQM
44	1	X			0.750	X	0.555	=	0.416	SQM
44a	0.5	X	1.975	+	1.700	X	2.700	=	4.961	SQM
45	1	X			0.600	X	2.225	=	1.335	SQM
46	1	X			0.750	X	0.750	=	0.563	SQM
47	0.5	X	2.770	+	3.625	X	1.975	=	6.315	SQM
48	0.5	X	3.625	+	2.705	X	3.165	=	10.017	SQM
49	0.5	X	2.705	+	2.665	X	0.400	=	1.074	SQM
50	0.5	X			4.205	X	16.710	=	35.133	SQM
51	0.5	X	18.745	+	17.565	X	7.030	=	127.630	SQM
51a	0.5	X	12.875	+	9.755	X	18.485	=	209.158	SQM
51b	1	X			15.790	X	12.875	=	203.296	SQM
51c	1	X			5.185	X	2.170	=	11.251	SQM
51d	0.5	X	10.605	+	5.985	X	0.780	=	6.470	SQM
51e	0.5	X	5.985	+	6.590	X	3.580	=	22.509	SQM
52	0.5	X	24.480	+	25.330	X	4.970	=	123.778	SQM
53	0.5	X	4.380	+	5.225	X	4.975	=	23.892	SQM
54	0.5	X	2.635	+	2.670	X	0.400	=	1.061	SQM
55	0.5	X	1.390	+	1.860	X	2.765	=	4.493	SQM
56	0.5	X	4.190	+	5.770	X	8.935	=	44.496	SQM
57	0.5	X	3.860	+	4.190	X	1.995	=	8.030	SQM
58	0.5	X	3.100	+	3.860	X	7.890	=	27.457	SQM
59	0.5	X	4.685	+	4.990	X	1.845	=	8.925	SQM
60	0.5	X	1.600	+	1.560	X	0.460	=	0.727	SQM
61	0.5	X	1.770	+	1.820	X	0.600	=	1.077	SQM
						TOTAL		=	1773.502	SQM

DEDUCTION AREA										
GROSS –B										
a	1	X			1.460	X	1.145	=	1.672	SQM
b	1	X			0.655	X	1.335	=	0.874	SQM
c	3	X			3.050	X	2.565	=	23.470	SQM
d	1	X			0.820	X	1.365	=	1.119	SQM
e	1	X			0.675	X	1.375	=	0.928	SQM
f	1	X			1.750	X	1.100	=	1.925	SQM
g	1	X			1.105	X	1.900	=	2.100	SQM
h	1	X			1.750	X	0.600	=	1.050	SQM
i	1	X			3.050	X	5.900	=	17.995	SQM
k	1	X			0.600	X	1.350	=	0.810	SQM
m	1	X			0.350	X	1.050	=	0.368	SQM
n	0.5	X	4.205	+	4.785	X	6.975	=	31.353	SQM
p	0.5	X	4.205	+	4.785	X	6.975	=	31.353	SQM
q	1	X			0.975	X	1.200	=	1.170	SQM
r	1	X			0.975	X	0.800	=	0.780	SQM
s	0.5	X	1.030	+	1.195	X	1.940	=	2.158	SQM
t	0.5	X	1.085	+	1.250	X	1.940	=	2.265	SQM
u	0.5	X	0.880	+	0.955	X	0.935	=	0.858	SQM
u1	2	X			0.145	X	0.935	=	0.271	SQM
v	0.5	X	0.880	+	0.955	X	0.935	=	0.858	SQM
w	0.5	X	0.940	+	1.010	X	0.785	=	0.765	SQM
w1	0.5	X	0.940	+	1.010	X	0.785	=	0.765	SQM
x	1	X			1.620	X	0.840	=	1.361	SQM
y	1	X			0.850	X	1.340	=	1.139	SQM
z	1	X			2.760	X	0.800	=	2.208	SQM
z1	1	X			1.570	X	0.650	=	1.021	SQM
z2	1	X			0.340	X	1.225	=	0.417	SQM
z3	1	X			5.600	X	3.150	=	17.640	SQM
z4	1	X			1.260	X	1.055	=	1.329	SQM
z5	1	X			0.935	X	0.655	=	0.612	SQM
z6	1	X			0.885	X	0.300	=	0.266	SQM
z7	1	X			0.400	X	0.600	=	0.240	SQM
z8	1	X			2.650	X	0.600	=	1.590	SQM
z9	3	X			3.050	X	2.400	=	21.960	SQM
						TOTAL		=	174.688	SQM

TOTAL REFUGE (15th & 23RD) FLOOR ADDITIONAL AREA	=	GROSS – A	+	GROSS – A1	-	GROSS – A2	
	=	1773.502	+	48.555	-	11.359	
GROSS – 1	=	1810.698	SQM				
TOTAL REFUGE (15th & 23RD) FLOOR DEDUCTION AREA	=	GROSS – B					
	=	174.688	SQM				
GROSS – 2	=	174.688	SQM				
TOTAL REFUGE (15th & 23RD) FLOOR FAR AREA	=	GROSS – 1	-	GROSS – 2			
	=	1810.698	-	174.688			
	=	1636.010	SQM				

NON FAR AREA (ADDITION)										
GROSS –C										
j	1	X			3.050	X	5.900	=	17.995	SQM
n	0.5	X	4.205	+	4.785	X	6.975	=	31.353	SQM
p	0.5	X	4.205	+	4.785	X	6.975	=	31.353	SQM
s	0.5	X	1.030	+	1.195	X	1.940	=	2.158	SQM
t	0.5	X	1.085	+	1.250	X	1.940	=	2.265	SQM
z3	1	X			5.600	X	3.150	=	17.640	SQM
z4	1	X			1.260	X	1.055	=	1.329	SQM
m1	1	X			5.185	X	2.775	=	14.388	SQM
m2	0.5	X	9.290	+	7.090	X	3.360	=	27.518	SQM
m3	1	X			4.685	X	3.630	=	17.007	SQM
m5	0.5	X	7.155	+	7.610	X	3.210	=	23.698	SQM
						TOTAL		=	186.704	SQM

NON FAR AREA(DEDUCTION)										
GROSS –D										
d1	1	X			0.750	X	2.350	=	1.763	SQM
d2	1	X			2.720	X	3.000	=	8.160	SQM
d3	1	X			1.800	X	3.000	=	5.400	SQM
d4	0.5	X	3.000	+	2.950	X	0.300	=	0.893	SQM
d5	0.5	X	0.370	+	0.850	X	2.915	=	1.778	SQM
d6	1	X			0.350	X	2.800	=	0.980	SQM
						TOTAL		=	18.973	SQM

TOTAL NON FAR AREA OF REFUGE (15th & 23RD) FLOOR	=	GROSS –C	-	GROSS –D	+	GROSS –E	
	=	186.704	-	18.973	+	1.598	
	=	169.328	SQM				
TOTAL BUILTUP AREA OF REFUGE (15th & 23RD) FLOOR	=	FAR AREA	+	NON FAR AREA			
	=	1636.010	+	169.328			
	=	1805.338	SQM				

NOTES:

- BUILDING WILL BE DESIGNED STRUCTURALLY AS PER RELEVANT IS CODES FOR EARTH QUAKE RESISTANCE.
- BUILDING HAS AUTOMATIC SPRINKLER SYSTEM ON ALL FLOORS.
- THE BUILDING IS FULLY MECHANICALLY VENTILATED & CENTRALLY AIR CONDITIONED WITH 100% POWER BACKUP.
- MSL 249.200 CONSIDERED AS ±00.00.
- ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE.

DESIGN CONSULTANT:

RSP

RSP Design Consultants (I) Pvt. Ltd.
RSP UNIT 103 FIRST FLOOR BESTECH BUSINESS TOWER, SOHNA ROAD, SECTOR 48, GURUGRAM, HARYANA 122018

OWNER: DLF LIMITED
THE SHOPPING MALL,DLF QUTAB ENCLAVE(PHASE-I) GURGAON, HARYANA 122002

ASSOCIATE ARCHITECT:

SBA Design N Code LLP
Architecture·Codes·Interiors
(Formerly known as RSIMS)
69,Nora Niwas Bhawani Kunj, (Behind D2), Vasant Kunj, New Delhi-110070.
Mob.: 9810791652,9811077209

STRUCTURAL ENGINEER:
LERA CONSULTING STRUCTURAL ENGINEERS (INDIA) PVT LTD
THE RUBY,NORTH WING, FLOOR 23,29 (SENPATI BAPAT MARG, DADAR (W) MUMBAI MAHARASHTRA INDIA 400 028

MEP CONSULTANT:
ARUP INDIA PRIVATE LIMITED
5TH FLOOR, JET PRIME, NEAR METRO STATION, SUREN ROAD, NEAR OFF., WESTERN EXPRESS HIGHWAY, ANDHERI EAST, MUMBAI, MAHARASHTRA INDIA 400 093

TITLE:-
REVISED BUILDING PLAN OF PHASE-R16 (THE DAHLIAS) FALLING IN GROUP HOUSING COLONY OVER AN AREA MEASURING 476.6015 ACRES NAMELY DLF-5 (EARLIER KNOWN AS ZONE-10, DLF CITY PHASE-V) IN SECTOR-42, 43, 53 & 54 GURUGRAM MANESAR URBAN COMPLEX BEING DEVELOPED BY DLF LIMITED.

PROJECT:- THE DAHLIAS

This is a "PROVISIONAL BUILDING PLAN" approved only for the purpose of inviting Objections from the general public.
S.T.P (G) Member Secretary B.P.A.C. — S.T.P (Hr.) Chairman B.P.A.C.

DTP(HQ) — ATP(HQ) — JD(HQ) — JD. — PA. — A.T.P.

Checked and found ok for Public Health (Internal) Service only subject to comments in forwarding letter No. 263370...Dt/14/08/25

Superintending Engineer (HQ) for Chief Engineer-I HSVP, Panchkula

JD(T) MEMBER BPAC

TO BE READ WITH THIS OFFICE MEMO NO.: 41383 DATED: 29-10-2025

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

Date : JULY.2025 — Scale : 1:100

Drawing Title:- 15th & 23rd REFUGE FLOOR PLAN & AREA CALCULATION TOWER-01

Drawing No:- T1-04

DLF5

02-30092025