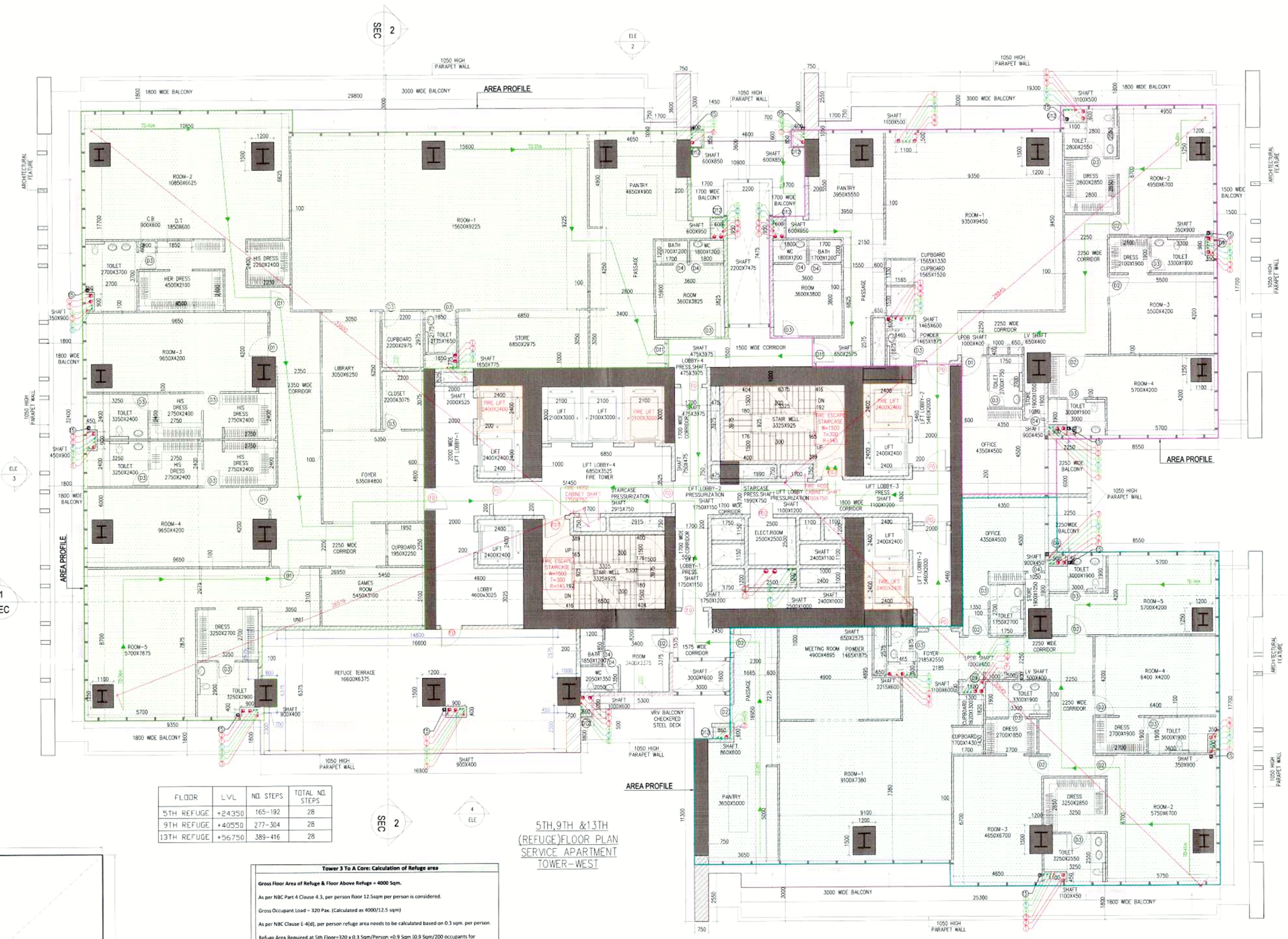


5TH,9TH &13TH (REFUGE)FLOOR PLAN SERVICE APARTMENT TOWER-WEST

LEGENDS :

01.	150M SOIL PIPE	
02.	150M WASTE PIPE	
03.	75M VENT PIPE	
04.	4 CWC PIPE DN 15M2	
05.	4 WC PIPE DN 15M2	
06.	4 CWC PIPE DN 15M2 FROM WC	
07.	4 CWC PIPE REFER TO DWG FROM TREATMENT PLANT ROOM	
08.	4 CWC PIPE REFER TO DWG FROM SERVICE FLOOR PLANS ROOM	
09.	4 FWC PIPE REFER TO DWG FROM BASEMENT PLANT ROOM	
10.	4 FWC PIPE REFER TO DWG FROM SERVICE FLOOR PLANS ROOM	
11.	4 FWC PIPE DN 15M2 FROM SERVICE FLOOR TO CLUB AREA	
12.	200M SOIL PIPE	
13.	200M WASTE PIPE	
14.	4 CWC PIPE DN 15M2 FROM SERVICE FLOOR TO EQUIPMENT RO	
15.	150M RAIN WATER PIPE	
16.	200M RAIN WATER PIPE	

DETAIL OF PIPES CONNECTION :-

- FROM WC TO STACK\WH.....100M PIPE
- FROM FT TO STACK\GT.....100M PIPE
- FROM WB TO FD/FT.....50M PIPE
- FROM WC WASTE TO FT.....65M PIPE
- FROM SH TO FT.....75M PIPE
- FLOOR TRAP 100x100.....FT
- FLOOR DRAIN 100x75 / 100x65.....FD
- FLOOR CLEAN OUT 100x100...COP

SCHEDULE OF JOINERY

ITEM NO	TAG	DETAILS	WIDTH	HEIGHT	LOCATION
1	FD1	120 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2100	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	SUITE MAIN DOOR
4	FD2.1	60 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2100	SERVICE DOOR
5	D1	ALUMINIUM GLASS DOOR	1200	2400	MAIN ENTRY DOOR (AUTOMATED DOOR)
6	D2	ALUMINIUM GLASS DOOR	1200	2400	BALCONY DOOR
7	D3	HDF HARDWOOD DOOR	1200	2400	ENTRY DOOR
8	D12	HDF HARDWOOD DOOR	1000	2400	BEDROOM DOORS
9	D9	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	850	2400	CARETAKER ROOM TOILET
12	D6	MS GLASS DOOR	900	2400	FHC'S
13	D8	HDF HARDWOOD DOOR	1200	2400	MACHINE ROOM TERRACE
14	D9	HDF HARDWOOD DOOR	1000	2400	BEDROOM DOORS
15	D10	HDF HARDWOOD DOOR	750	2400	PUBLIC/AC TOILET (STATS)
16	D11	ALUMINIUM DOOR	1200	2400	KITCHEN DOOR (OPENING IN BALCONY)
17	D12	HDF HARDWOOD DOOR	800	2100	SMART DOOR
18	D13	60 MIN FIRE RATED HDF HARDWOOD DOOR	1200	2400	PRIVATE LIFT LOBBY

FLOOR	LVL	NO. STEPS	TOTAL NO. STEPS
5TH REFUGE	+24350	165-192	28
9TH REFUGE	+40550	277-304	28
13TH REFUGE	+56750	389-416	28

Tower 3 To A Core: Calculation of Refuge area

Gross Floor Area of Refuge & Floor Above Refuge = 4000 Sqm.

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

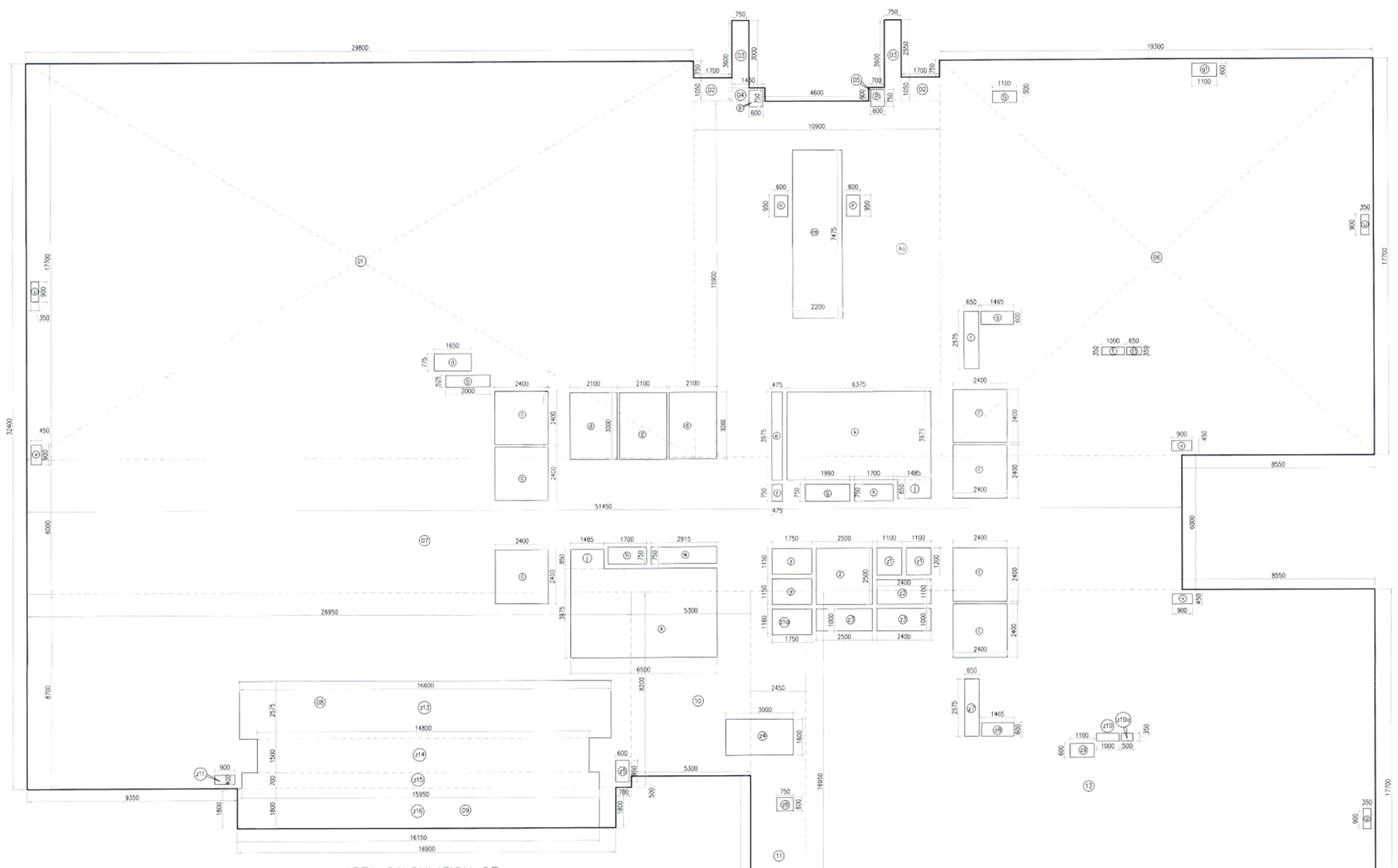
Gross Occupant Load = 320 Pax. (Calculated as 4000/12.5 sqm)

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=320 x 0.3 Sqm/Person =0.9 Sqm (0.3 Sqm/200 occupants for wheelchair space)

Refuge Area Required = 94.423 sqm.

Refuge Area Provided= 101.630 sqm.



AREA CALCULATION OF 5TH,9TH&13TH(REFUGE)FLOOR

5TH,9TH &13TH (REFUGE) TYPICAL FLOOR AREA CALCULATION

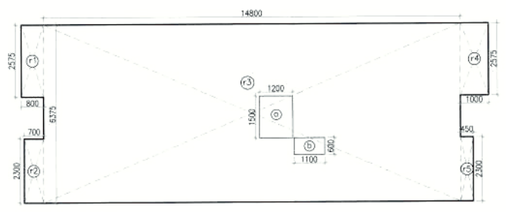
GROSS - A									
1	=	1	X	29.800	X	17.700	=	527.460	SQM
2	=	2	X	1.700	X	1.250	=	3.570	SQM
3	=	2	X	0.750	X	3.600	=	5.400	SQM
4	=	1	X	1.450	X	0.600	=	0.870	SQM
4a	=	1	X	10.900	X	15.900	=	173.310	SQM
5	=	1	X	0.700	X	0.800	=	0.420	SQM
6	=	1	X	19.300	X	17.700	=	341.610	SQM
7	=	1	X	51.450	X	6.000	=	308.700	SQM
8	=	1	X	26.950	X	8.700	=	234.465	SQM
9	=	1	X	16.900	X	1.800	=	30.420	SQM
10	=	1	X	5.300	X	8.200	=	43.460	SQM
11	=	1	X	2.450	X	16.960	=	41.528	SQM
12	=	1	X	0.750	X	2.550	=	1.913	SQM
13	=	1	X	25.300	X	17.700	=	447.810	SQM
						TOTAL	=	**2160.935**	**SQM**
DEDUCTION AREA									
GROSS – B									
a	=	1	X	1.650	X	0.775	=	1.279	SQM
b	=	1	X	2.000	X	0.525	=	1.050	SQM
c	=	7	X	2.400	X	2.400	=	40.320	SQM
d	=	3	X	2.100	X	3.000	=	18.900	SQM
e	=	1	X	0.475	X	3.975	=	1.886	SQM
f	=	1	X	0.475	X	0.750	=	0.356	SQM
g	=	1	X	1.900	X	0.750	=	1.425	SQM
h	=	2	X	1.700	X	0.750	=	2.550	SQM
j	=	2	X	1.485	X	0.850	=	2.520	SQM
k	=	1	X	6.375	X	3.975	=	25.341	SQM
m	=	1	X	2.200	X	7.475	=	16.445	SQM
n	=	2	X	0.600	X	0.950	=	1.140	SQM
p	=	2	X	0.600	X	0.750	=	0.900	SQM
q	=	1	X	1.100	X	0.500	=	0.550	SQM
q1	=	1	X	1.100	X	0.600	=	0.660	SQM
r	=	2	X	0.650	X	2.575	=	1.674	SQM
s	=	1	X	1.465	X	0.600	=	0.879	SQM
t	=	1	X	1.000	X	0.350	=	0.350	SQM
t1	=	1	X	0.650	X	0.350	=	0.228	SQM
u	=	2	X	0.350	X	0.900	=	0.630	SQM
v	=	2	X	0.900	X	0.450	=	0.810	SQM
w	=	1	X	2.915	X	0.750	=	2.186	SQM
x	=	1	X	6.500	X	3.975	=	25.838	SQM
y	=	2	X	1.750	X	1.150	=	4.025	SQM
z	=	1	X	2.500	X	2.500	=	6.250	SQM
z1	=	2	X	1.100	X	1.200	=	2.640	SQM
z1a	=	1	X	1.750	X	1.160	=	2.030	SQM
z2	=	1	X	2.400	X	1.100	=	2.640	SQM
z3	=	2	X	2.500	X	1.000	=	5.000	SQM
z4	=	1	X	3.000	X	1.600	=	4.800	SQM
z5	=	1	X	0.600	X	0.950	=	0.570	SQM
z6	=	1	X	0.750	X	0.600	=	0.450	SQM
z7	=	1	X	0.650	X	2.575	=	1.674	SQM
z8	=	1	X	1.465	X	0.600	=	0.879	SQM
z9	=	1	X	1.100	X	0.600	=	0.660	SQM
z10	=	1	X	1.000	X	0.350	=	0.350	SQM
z10a	=	1	X	0.500	X	0.350	=	0.175	SQM
z11	=	1	X	0.900	X	0.400	=	0.360	SQM
z12	=	1	X	1.100	X	0.450	=	0.495	SQM
z13	=	1	X	16.600	X	2.575	=	42.745	SQM
z14	=	1	X	14.800	X	1.500	=	22.200	SQM
z15	=	1	X	15.950	X	0.700	=	11.165	SQM
z16	=	1	X	16.150	X	1.800	=	29.070	SQM
						TOTAL	=	**286.168**	**SQM**

TOTAL FAR OF 5TH,9TH &13TH (REFUGE) TYPICAL FLOOR	=	**GROSS - A**	-	**GROSS – B**	
	=	**2160.935**	-	**286.168**	
	=	**1874.768**			**SQM**

TOTAL BUILTUP AREA OF 5TH,9TH &13TH (REFUGE) TYPICAL FLOOR

GROSS – C							
j	=	2	X	1.485	X	0.850	=	2.525	SQM
k	=	1	X	6.375	X	3.975	=	25.341	SQM
r	=	1	X	6.500	X	3.975	=	25.838	SQM
y	=	1	X	2.500	X	2.500	=	6.250	SQM
z13	=	1	X	16.600	X	2.575	=	42.745	SQM
z14	=	1	X	14.800	X	1.500	=	22.200	SQM
z15	=	1	X	15.950	X	0.700	=	11.165	SQM
z16	=	1	X	16.150	X	1.800	=	29.070	SQM
						TOTAL	=	**165.133**	**SQM**

TOTAL BUILTUP AREA OF 5TH,9TH &13TH (REFUGE) TYPICAL FLOOR	=	**FAR AREA**	+	**GROSS – C**	
	=	**1874.768**	+	**165.133**	
	=			**2039.900**	**SQM**
NON FAR AREA OF 5TH,9TH &13TH (REFUGE) TYPICAL FLOOR	=	**BUILTUP AREA**	-	**FAR AREA**	
	=	**2039.900**	-	**1874.768**	
	=	**165.133**	**SQM**		



5th,9th & 13th REFUGE FLOOR AREA CALCULATION

GROSS – A									
r1	=	1	X	0.800	X	2.575	=	2.060	**SQM**
r2	=	1	X	0.700	X	2.300	=	1.610	**SQM**
r3	=	1	X	14.800	X	6.375	=	94.350	**SQM**
r4	=	1	X	1.000	X	2.575	=	2.575	**SQM**
r5	=	1	X	0.450	X	2.300	=	1.035	**SQM**
						TOTAL	=	**101.630**	**SQM**
GROSS – B									
a	=	1	X	1.200	X	1.500	=	1.800	**SQM**
b	=	1	X	1.100	X	0.600	=	0.660	**SQM**
						TOTAL	=	**2.460**	**SQM**

TOTAL AREA CALCULATION 5th,9th & 13th REFUGE FLOOR	=	**GROSS – A**	-	**GROSS – B**	
	=	101.630		**2.460**	
	=	**99.170**	**SQM**		
GROSS AREA OF 5th,9th & 13th REFUGE FLOOR	=	**1906.447**	**SQM**		
GROSS AREA OF 2ND TO 4TH & 6TH TO 8TH & 10TH,&14TH FLOOR	=	**1990.341**	**SQM**		
TOTAL	=	**3896.788**	**SQM**		
REFUGE AREA REQUIRED	=	**3896.788X0.3/12.5**	+	**ADDITIONAL SPACE TO ACCOMMODATE ONE WHEEL CHAIR SPACE**	
	=	**93.523**	+	**0.9**	
	=	**94.423**	**SQM**		
REFUGE AREA PROVIDED	=	**101.630**	**SQM**		

SANCTIONED
TO BE READ WITH THIS OFFICE
MEMO NO.:
DATED :

Checked and found ok for Public Health Consumer Service only subject to comments in the accompanying letter No. 2022/2024 Dt. 24.7.24

Superintending Engineer (HQ)
Engineer-I
SDVP, Panchkula

Note :-

1. BUILDING WILL BE DESIGNED (STRUCTURES) AS PER RELEVANT IS CODES FOR EARTH QUAKE RESISTANCE.
2. BUILDING ARE ARTIFICIALLY LIGHTED,MECHANICALLY VENTILATED & HAVE 100% POWER BACKUP.

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, Info TEL: 4705868 FAX: 4705818
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.
Tel.: 011-26898616,26898617
www.rsms-arch.com

DTP(HQ) ATP(HQ) STP(HQ) FP(HQ)

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

JUNE.-2024 | Scale : 1:100

Drawing Title:-
5TH,9TH & 13TH (REFUGE) FLOOR PLAN & AREA CALCULATION (TOWER WEST)

Drawing No:- WT-03
28082024-3