

TOWER 3
Refuge area calculation

Floor	Area in sq.mt. / Nos
1 (Gross area of 1 floor)	558.408 (SQ.M)
2 (Gross area of 2 floors)	1116.812 (SQ.M)
3 (Total Gross area)	1116.812 (SQ.M)
4 (Total No. of Occupancy (1 person every 12.5 sq.mt. as per NBC))	89.345 Nos.
5 (Refuge area required per person as per NBC)	28.803 (SQ.M)
6 (Wheel chair space @ 0.8 sq.mt. for every 200 occupants as per NBC)	1.800 (SQ.M)
7 (Total Refuge area required)	28.603 (SQ.M)
8 (Total Refuge area proposed)	29.682 (SQ.M)

Refuge floor levels

Floors	Levels (Mts.)
16th floor level	LVL + 60.700 M.
25th floor level	LVL + 90.400 M.
34th floor level	LVL + 120.100 M.

FAR AREA AT TYPICAL REFUGE FLOOR (TOWER-3 & 4)
(All Distances are in Meter & Area in Sq.M)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
A	1	RECTANGLE	L X B	34.600	28.320	910.872
TOTAL(A) = 910.872						

BALCONY IN NON FAR AREA (B)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
B1	4	RECTANGLE	L X B	2.300	1.500	16.550
B2	1	RECTANGLE	L X B	0.900	2.100	1.890
B3	1	RECTANGLE	L X B	1.300	1.450	1.937
B4	1	RECTANGLE	L X B	5.200	2.100	10.920
B5	1	RECTANGLE	L X B	2.750	2.100	5.775
B6	1	RECTANGLE	L X B	2.840	2.100	5.974
B7	3	RECTANGLE	L X B	1.300	1.450	5.611
B8	1	RECTANGLE	L X B	2.850	2.100	5.985
B9	4	RECTANGLE	L X B	2.000	1.800	14.400
B10	1	RECTANGLE	L X B	0.910	2.190	1.993
B11	1	RECTANGLE	L X B	0.920	2.720	1.888
B12	1	RECTANGLE	L X B	0.280	0.820	0.230
B13	1	RECTANGLE	L X B	1.440	3.000	4.320
B14	1	RECTANGLE	L X B	0.280	2.800	0.812
B15	1	RECTANGLE	L X B	1.800	0.970	1.746
B16	1	RECTANGLE	L X B	0.820	1.780	1.058
B17	1	RECTANGLE	L X B	2.960	1.220	3.110
B18	1	RECTANGLE	L X B	0.290	2.300	0.667
B19	1	RECTANGLE	L X B	0.290	2.950	0.856
B20	1	RECTANGLE	L X B	1.440	3.150	4.536
B21	1	RECTANGLE	L X B	2.880	2.100	6.048
B22	1	RECTANGLE	L X B	2.910	2.100	6.111
B23	1	RECTANGLE	L X B	3.350	2.100	7.035
TOTAL(B) = 107.341						

BALCONY IN FAR AREA (C)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
CF1	1	RECTANGLE	L X B	3.200	0.300	0.960
CF2	1	RECTANGLE	L X B	2.900	0.300	0.870
CF3	1	RECTANGLE	L X B	2.840	0.300	0.852
CF4	1	RECTANGLE	L X B	2.850	0.300	0.855
CF5	1	RECTANGLE	L X B	3.350	0.300	1.005
CF6	1	RECTANGLE	L X B	2.750	0.300	0.825
CF7	1	RECTANGLE	L X B	2.910	0.300	0.873
CF8	1	RECTANGLE	L X B	2.850	0.300	0.857
TOTAL(C) = 7.137						

NON FAR SERVICE SHAFT AREA (D)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
D	4	RECTANGLE	L X B	0.950	0.840	3.572
D	4	RECTANGLE	L X B	0.250	1.700	1.700
D	4	RECTANGLE	L X B	0.200	1.900	1.360
D	4	RECTANGLE	L X B	1.000	0.640	3.760
TOTAL(D) = 10.392						

OUTSIDE AREA (E)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
E	1	RECTANGLE	L X B	3.700	0.300	2.220
E	2	RECTANGLE	L X B	6.000	2.100	10.500
E	3	RECTANGLE	L X B	3.400	0.300	2.040
E	4	RECTANGLE	L X B	0.910	0.180	0.354
E	5	RECTANGLE	L X B	7.210	1.070	7.719
E	6	RECTANGLE	L X B	0.570	2.800	1.566
E	7	RECTANGLE	L X B	3.250	3.550	11.538
E	8	RECTANGLE	L X B	7.900	1.150	9.085
E	9	RECTANGLE	L X B	6.780	2.190	12.814
E	10	RECTANGLE	L X B	3.750	0.300	2.220
E	11	RECTANGLE	L X B	6.000	2.100	10.500
E	12	RECTANGLE	L X B	3.400	0.300	2.040
E	13	RECTANGLE	L X B	0.910	0.180	0.354
E	14	RECTANGLE	L X B	7.210	1.220	8.889
E	15	RECTANGLE	L X B	12.120	1.200	14.520
E	16	RECTANGLE	L X B	7.280	3.350	24.388
E	17	RECTANGLE	L X B	5.780	2.190	12.614
E	18	RECTANGLE	L X B	0.570	2.850	1.623
TOTAL(E) = 150.913						

NON FAR SERVICE SHAFT & LIFT (F)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
F	1	RECTANGLE	L X B	2.400	2.300	16.680
F	2	RECTANGLE	L X B	2.200	2.800	6.160
F	3	RECTANGLE	L X B	2.400	2.200	5.280
F	4	RECTANGLE	L X B	0.620	1.200	0.744
F	5	RECTANGLE	L X B	0.780	1.230	0.959
F	6	RECTANGLE	L X B	1.250	2.300	2.875
F	7	RECTANGLE	L X B	4.000	0.450	1.800
F	8	RECTANGLE	L X B	3.000	2.540	7.620
F	9	RECTANGLE	L X B	1.000	2.200	2.200
F	10	RECTANGLE	L X B	0.580	0.680	0.394
F	11	RECTANGLE	L X B	1.150	0.480	0.552
F	12	RECTANGLE	L X B	3.000	2.540	7.620
F	13	RECTANGLE	L X B	1.000	1.710	1.710
F	14	RECTANGLE	L X B	1.000	0.900	0.900
TOTAL(F) = 59.270						

NON FAR STAIRCASE AREA (G)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
G	1	RECTANGLE	L X B	4.500	2.750	24.375
G	2	RECTANGLE	L X B	0.330	1.250	0.413
G	3	RECTANGLE	L X B	0.350	1.250	0.438
G	4	RECTANGLE	L X B	4.000	1.800	7.200
TOTAL(G) = 32.788						

REFUGE FLOOR (H)

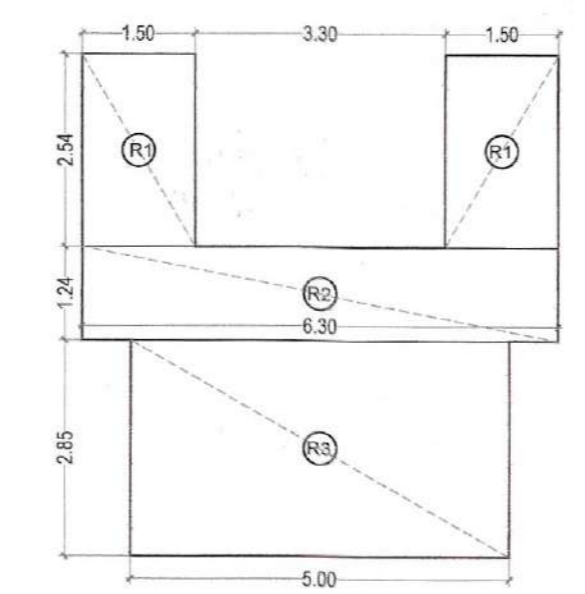
ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
H	1	RECTANGLE	L X B	5.000	2.850	14.250
H	2	RECTANGLE	L X B	0.300	1.240	0.372
H	3	RECTANGLE	L X B	1.500	1.340	2.010
H	4	RECTANGLE	L X B	1.050	1.200	1.260
TOTAL(H) = 28.692						

TOTAL FAR AREA AT TYP. LVL. = (A+B+C+D+E+F+G+H)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
A	1	RECTANGLE	L X B	34.600	28.320	910.872
B	1	RECTANGLE	L X B	10.392	166.913	68.270
C	1	RECTANGLE	L X B	10.392	166.913	68.270
D	1	RECTANGLE	L X B	10.392	166.913	68.270
E	1	RECTANGLE	L X B	10.392	166.913	68.270
F	1	RECTANGLE	L X B	10.392	166.913	68.270
G	1	RECTANGLE	L X B	10.392	166.913	68.270
H	1	RECTANGLE	L X B	10.392	166.913	68.270
TOTAL FAR (I) = 525.804 SQ.MT						

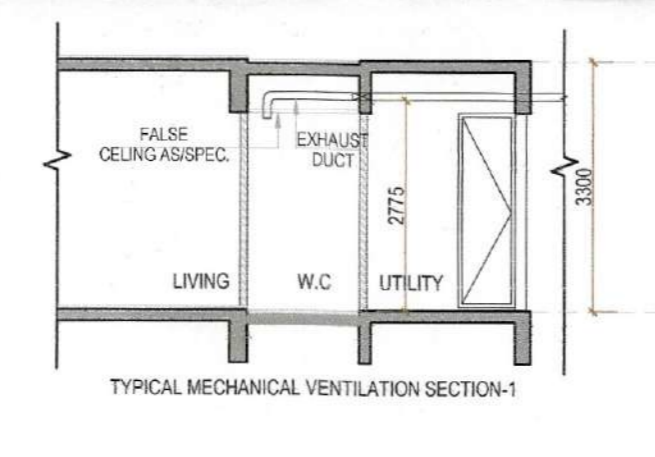
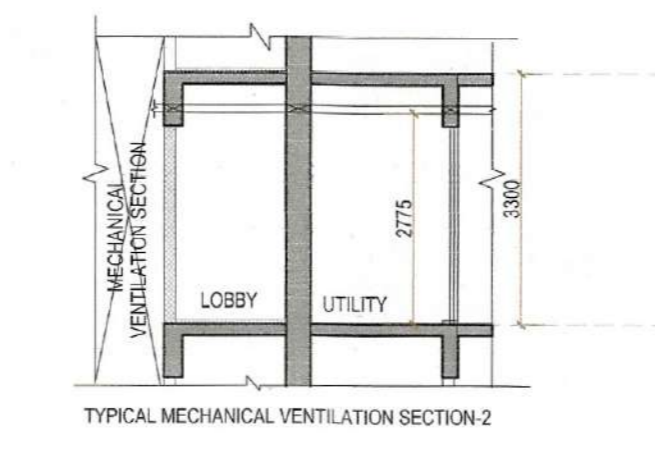
TOTAL BUILT UP AREA AT TYP. LVL. = (A+C+D+E)

ITEM	NO.S	SHAPE	FORMULA	WIDTH (MTR.)	LENGTH (MTR.)	AREA(SQ.MT)
A	1	RECTANGLE	L X B	34.600	28.320	910.872
C	1	RECTANGLE	L X B	10.392	166.913	68.270
D	1	RECTANGLE	L X B	10.392	166.913	68.270
E	1	RECTANGLE	L X B	10.392	166.913	68.270
TOTAL FAR (II) = 691.091 SQ.MT						



TYPICAL MECHANICAL VENTILATION CALCULATION FOR W.C.

Sl. No.	Location	Area (sq.ft)	Height (ft)	Volume (Cu.ft)	Design CFM	Selected Exhaust fan	Fan size L X B X H (mm)	Exhaust Duct size Dia (mm)
1.1 TYPICAL MECHANICAL VENTILATION FOR W.C.								
1.1	WC	17	10.15	172.55	34.51	1# 100 cfm cassette inline fan	270 X 270 x 171	110 (OD)
1.2	Toilet	48	10.15	487.2	97.44	1# 100 cfm cassette inline fan	271 X 270 x 171	110 (OD)



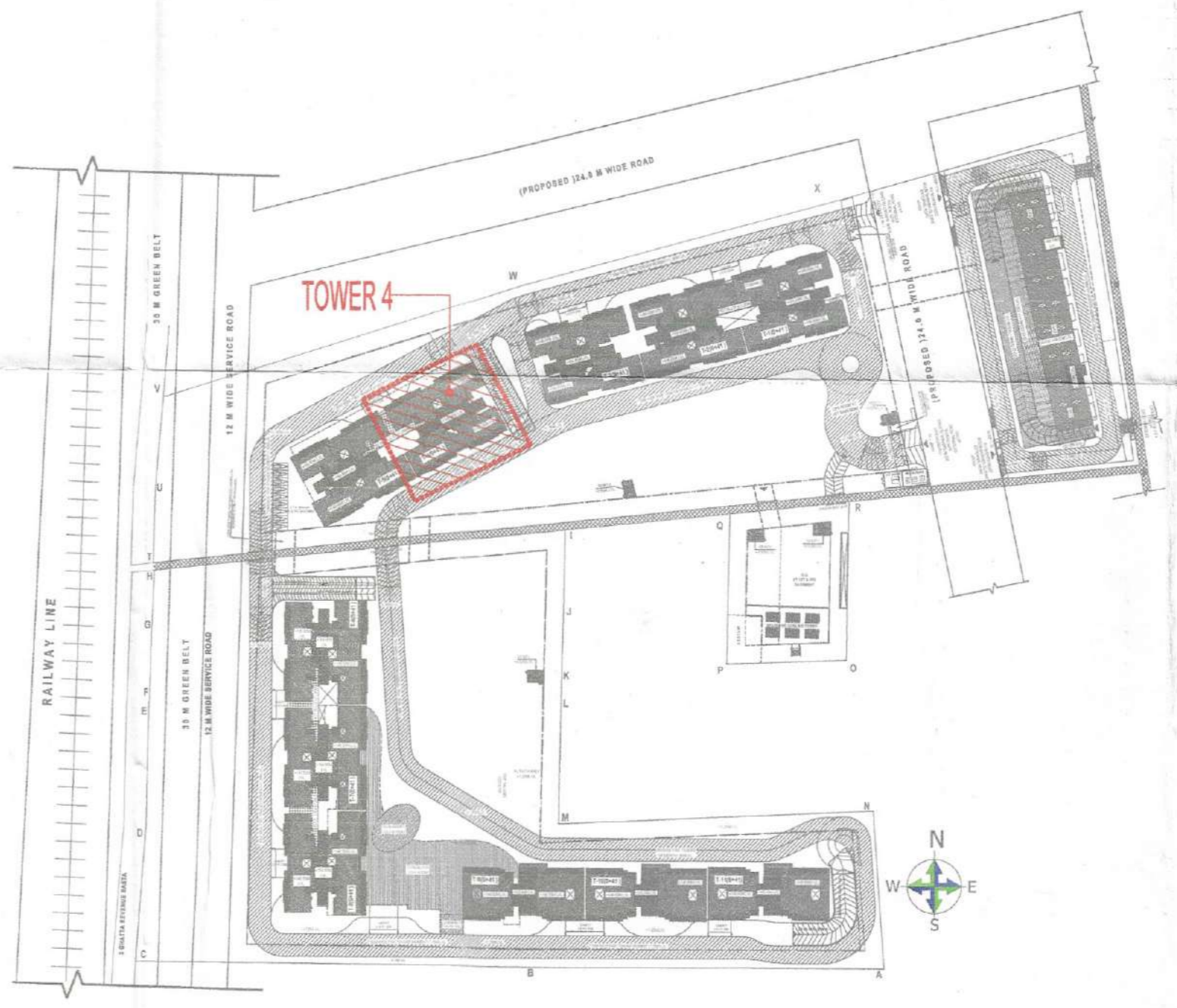
- PLUMBING LEGEND:**
- 1 110 OD SOIL & VENT PIPE
 - 2 110 OD WASTE & VENT PIPE
 - 2a 110 OD KITCHEN WASTE & VENT PIPE
 - 3 100 OD ANTI-SYPHONAGE PIPE
 - 4 DOMESTIC WATER SUPPLY DOWN TAKE PIPE
 - 5 FLUSHING WATER SUPPLY DOWN TAKE PIPE
 - 6 100 OD RAIN WATER PIPE FOR TERRACE
 - 7 DOMESTIC WATER RISER PIPE
 - 8 FLUSHING WATER RISER PIPE
 - 10 110 OD CONDENSATE WATER DRAIN PIPE
 - AD ACCESS DOOR
 - RL ROAD LEVEL
 - LL INVERT LEVEL OF PIPE
 - CL CONNECTION LEVEL

DOOR SCHEDULE TYPICAL FLOOR (TOWER-4)

S.NO	TYPE	OPENING	LINTEL (FROM SILL)	SILL	HEIGHT	LOCATION
1	D1	1200	2450	50	2400	(MAIN DOOR) (FIRE RATED DOOR)
2	D2	900	2450	50	2400	BED ROOM, S ROOM
3	D2'	900	2450	50	2400	BED ROOM, S ROOM (FIRE RATED DOOR)
4	D3	750	2450	50	2400	TOILET BALCONY
5	D4	600	2450	50	2400	CURT DOOR UNIT SHAFT
6	D5	600	2450	350	2100	ELE. & LV. SHAFT
6	FD	1200	2450	50	2400	REFUGE @ 16th, 25th, 34th (FIRE RATED DOOR)

WINDOW SCHEDULE TYPICAL FLOOR (TOWER-4)

S.NO	TYPE	OPENING	LINTEL (FROM SILL)	SILL	HEIGHT	LOCATION
1	SD1	2100	2600	50	2550	BEDROOM-1&2
2	SD2	2075	2600	50	2550	LIVING/DINING
3	SD3	4765	2600	50	2550	BEDROOM-3
4	SD4	1215	2600	50	2550	LIVING/DINING
5	SD5	2400	2600	50	2550	BEDROOM-1 & 2
6	SD6	5200	2600	50	2550	LIVING/DINING
7	SD7	1500	2600	50	2550	KITCHEN
9	W	1200	2600	950	1750	STAIRCASE
8	WT	2100	2511	1111	1400	STAIRCASE
12	V	750	2600	1650	1950	TOILET



KEY PLAN SCALE: - NTS

(Handwritten signatures and stamps)
S.T.P. (HQ) S.T.P. (G) C.N.P. (HP)
Member Secretary Member Chairman
B.P.A.C. B.P.A.C. B.P.A.C.
DTP (HQ) ATP (HQ)

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

GURPREET J.D. (HQ)

CLIENT: SIGNATUREGLOBAL HOMES PVT. LTD

ARCHITECT: NISAR AHMED ANSARI ARCHITECT (B.ARCH) CA/2005/36034

(Handwritten note)
Checked and found ok for Public Health (Internal) Service only subject to comments in forwarding letter No. 296976 dt 07/09/2025

PROJECT: PROPOSED MIXED LAND USE COLONY (99% RESIDENTIAL COMPONENT & 1% COMMERCIAL COMPONENT) UNDER TOP POLICY OF THE AREA MEASURING 13.5566 ACRES IN THE REVENUE ESTATE, GADOLI, KALAN, SECTION 10, STD. GURGRAM MANESAR URBAN COMPLEX, LICENSE NO.172 OF 2024, DATED 03.12.2024, BEING DEVELOPED BY SIGNATUREGLOBAL HOMES PVT. LTD

DRAWING TITLE: 16TH 25TH & 34TH FLOOR AREA LINE DIAGRAM FLOOR & AREA LINE DIAGRAM (TYPE B1 TOWER 4)

SHEET NO. 44

SCALE: - 1:100
DATE: - 2025.08.14

NISAR AHMED ANSARI ARCHITECT (B.ARCH) CA/2005/36034

