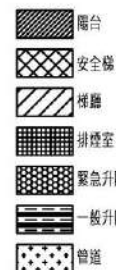




重複步行距離

A1	$L=4.52+7.23+2.93+1.47+0.85=17.69\text{M} < 20\text{M}$
A2	$L=4.61+6.23+3.45+1.47+0.85=16.61\text{M} < 20\text{M}$
A3	$L=4.46+2.57+4.63+2.48+1.47+0.85=16.46\text{M} < 20\text{M}$
B1	$L=4.57+2.96+7.69+1.02+0.75=16.99\text{M} < 20\text{M}$
B2	$L=4.6+6.55+5.22+1.05+1.02+0.75=19.19\text{M} < 20\text{M}$
B3	$L=4.63+4.69+3.45+2.61+1.05+1.02+0.75=18.2\text{M} < 20\text{M}$
C1	$L=4.7+6.82+1.32+1.52=14.36\text{M} < 20\text{M}$
C2	$L=9.61+4.4=14.01\text{M} < 20\text{M}$
D1	$L=4.01+4.49+7.78+0.71=16.99\text{M} < 20\text{M}$
D2	$L=4.58+8.07+0.98=13.63\text{M} < 20\text{M}$
E1	$L=4.51+2.48+2.34+3.3=12.63\text{M} < 50\text{M}$
E2	$L=4.5+5.78=10.28\text{M} < 50\text{M}$
F1	$L=3.56+1.93+6.69+1.94=12.18\text{M} < 50\text{M}$
F2	$L=4.3+5.75+0.71=10.05\text{M} < 50\text{M}$

A1	$2.4 \times 2.5 + 1 \times 1.75 + 2.2 \times 2.5 + 2.8 \times 2.5 + 2.8 \times 2.5 + 1 \times 1.75$	=29.00#	> 77.83/8=9.73	...OK
A2	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 0.9 \times 1.3 + 1.6 \times 1.5$	=21.57#	> 70.06/8=8.76	...OK
A3	$2.2 \times 2.5 + 2 \times 2.5 + 0.84 \times 2.5 + 1 \times 2.5 + 1.2 \times 1.5$	=16.90#	> 60.73/8=7.59	...OK
B1	$2.4 \times 2.5 + 1.8 \times 2.5 + 0.84 \times 2.5 + 1.2 \times 2.5 + 1.4 \times 1.5$	=17.20#	> 58.64/8=7.33	...OK
B2	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.2 \times 2.5 + 1.4 \times 1.8 + 1 \times 1.75 + 1.6 \times 1.4$	=24.01#	> 71.44/8=8.93	...OK
B3	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 2 \times 2.5 + 1.6 \times 1.5$	=25.40#	> 85.35/8=10.67	...OK
C1	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 2 \times 2.5 + 1.6 \times 1.5$	=25.40#	> 82.94/8=10.37	...OK
C2	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 1.6 \times 1.5 + 1 \times 1.75$	=22.15#	> 78.75/8=9.84	...OK
D1	$2.2 \times 2.5 + 2.4 \times 2.5 + 1.6 \times 1.5 + 2 \times 1.5 + 2 \times 2.5 + 1.4 \times 2.5$	=25.40#	> 89.55/8=11.19	...OK
D2	$1.4 \times 1.5 + 2.8 \times 2.5 + 2.6 \times 2.5 + 2 \times 1.5 + 1.6 \times 1.5$	=21.00#	> 93.27/8=11.66	...OK
E1	$2.8 \times 2.5 + 2.8 \times 2.5 + 2.4 \times 2.5 + 1.6 \times 1.5 + 1 \times 1.75$	=23.15#	> 70.61/8=8.83	...OK
E2	$2.8 \times 2.5 + 2.8 \times 2.5 + 2.4 \times 2.5 + 1.6 \times 1.5 + 1 \times 1.75$	=24.15#	> 70.96/8=8.87	...OK
F1	$2.4 \times 2.5 + 2.4 \times 2.5 + 1.8 \times 2.5 + 2.2 \times 2.5$	=22.00#	> 59.59/8=7.45	...OK
F2	$2.2 \times 2.5 + 2.2 \times 2.5 + 2.6 \times 2.5 + 2.2 \times 2.5 + 0.9 \times 2.5$	=25.25#	> 57.58/8=7.20	...OK



A1	$4.1 \times 0.45 + 3.595 \times 2.35 + 5.7 \times 11.37 + 4.15 \times 2.7$	=	86.31 #
A2	$10.295 \times 3.05 + 11.345 \times 2.65 + 1.675 \times 2.15 + 2.6 \times 4.82$	=	77.60 #
A3	$0.8 \times 2.17 + 2.8 \times 5.075 + 2.5 \times 3.52 + 6.775 \times 3 + 8.375 \times 2.75$ $+ 0.45 \times 1.675$	=	68.86 #
B1	$8.37 \times 2.8 + 6.77 \times 3 + 2.75 \times 8.37$	=	66.77 #
B2	$6.15 \times 1.47 + 8.55 \times 2.33 + 5.6 \times 9$	=	79.36 #
B3	$4.62 \times 2.85 + 4.27 \times 3.45 + 6.715 \times 6.4 + 1.45 \times 2.17 + 3.5 \times 6.15$	=	94.57 #
C1	$1.85 \times 5.75 + 5.3 \times 1.33 + 7.44 \times 9.6 + 1.15 \times 2.65$	=	92.16 #
C2	$2.71 \times 7.25 + 3.8 \times 4.97 + 2.45 \times 2.375 + 7.15 \times 6.75 + 3.78 \times 5.3$	=	88.77 #
D1	$1.6 \times 1.25 + 2.675 \times 4.235 + 3 \times 4.685 + 3.985 \times 2.775$ $+ 3.225 \times 3.085 + 2.89 \times 2.055 + 7.145 \times 5.675$	=	96.98 #
D2	$4.21 \times 1 + 1.73 \times 1.45 + 8.49 \times 9.71 + 0.59 \times 1.65 + 5.35 \times 2$ $+ 2.6 \times 0.4$	=	101.87 #
E1	$1.75 \times 1.45 + 4.3 \times 9.71 + 10.71 \times 3.26$	=	79.21 #
E2	$2.835 \times 1 + 4.86 \times 0.35 + 7.505 \times 9.71 + 1.75 \times 1.45$	=	79.95 #
F1	$2.515 \times 3.15 + 2.3 \times 1.05 + 1.885 \times 2 + 9.435 \times 5.65$	=	67.42 #
F2	$7.65 \times 1.85 + 6.5 \times 8.15$	=	67.13 #
小计		=	1146.96 #

A1	$1.0 \times 3.775 + 4.3 \times 1.3$	=	9.37
A2	$3.795 \times 1.0 + 1.95 \times 2.6$	=	8.87
A3	3×1.675	=	5.03
B1	3×1.675	=	5.03
B2	$2.425 \times 1 + 3.0 \times 1.35$	=	6.48
B3	$4.27 \times 1.675 + 3.35 \times 1.0$	=	10.50
C1	$3.68 \times 1.675 + 1.11 \times 1.6 + 3.25 \times 1.0$	=	11.19
C2	$2.97 \times 1.8 + 1.0 \times 3.37$	=	8.72
D1	$3.225 \times 1.675 + 1.0 \times 3.425$	=	8.83
D2	$1.525 \times 2.55 + 3.12 \times 1.2$	=	7.63
E1	$1.525 \times 2.55 + 3.12 \times 1.2$	=	7.63
E2	$2.92 \times 1.525 + 3.12 \times 1.2$	=	8.20
F1	2.3×1.525	=	3.51
F2	$2.1 \times 2.5 + 1.925 \times 1.5$	=	5.74
A,B	$0.35 \times 1.5 + 1.35 \times 1.3 + 1.425 \times 14.675 + 1.35 \times 1.275$	=	24.91
D	1.35×1.85	=	2.50
小计		=	134.14

A棟	0.65x1.05+3.4x3.4+3.76x2.68	=	22.32㎡
B棟	0.82x1.25+5.1x2.6	=	14.29㎡
C棟	2.25x5.11	=	11.50㎡
D棟	5.6x2.51	=	14.06㎡
E棟	2.4x3.4	=	8.16㎡
F棟	2.29x4.05	=	9.27㎡
小計		=	79.60㎡

A轴	0.65x1.05	=	0.68 #
B轴	0.82x1.25	=	1.03 #
小柱		=	1.71 #

A樓	5.075x3.42	=	17.36 m ²
B樓	5.045x3.42	=	17.25 m ²
C樓	1.11x1.34+2.43x3.46+(4.57+3.13)x0.72/2 +1.11x1.98+4.57x3.2+1.8x1.85	=	32.77 m ²
D樓	2.7x4.57+0.59x1.05+0.35x0.7+1.275x0.38 +4.09x2.89	=	25.51 m ²
E樓	3.4x2.59+2.15x1.05+3.4x3.17	=	21.84 m ²
F樓	2.325x4.27+2.29x3.6	=	18.17 m ²
小計:		=	132.9 m ²

A樓	2.35x2.15	=	5.05 ㎡
B樓	2.4x2.17	=	5.21 ㎡
E樓	2.35x2.15	=	5.05 ㎡
F樓	2.1x2	=	4.20 ㎡
小計		=	19.51 ㎡

A,B槽	2.7x2.5	=	6.75 m ²
C槽	2.45x2.55	=	6.25 m ²
D槽	2.5x2.45	=	6.13 m ²
小計		=	19.13 m ²

C棟	$4.5 \times 2.39 + 1.45 \times 0.4$	=	11.34 m ²
D棟	$2.45 \times 4.085 + 1.425 \times 1.15$	=	11.65 m ²
小計		=	22.99 m ²

A,B轴	0.55x1.65x2	=	1.82 m³
D轴	1.535x2.45	=	3.76 m³
小计		=	5.58 m³

樓地板面複檢計
 $1146.96+79.60+132.9+19.51+19.13+22.99+5.58 = 1426.67 \text{ ㎡}$
 陽台外挑斜頂面複檢計
 $134.14 \text{ ㎡} < 1426.67 \times 10\% = 142.67 \text{ ㎡} \dots \text{OK}$
 梯廳外挑斜頂面複檢計
 $79.60 - 1.71 = 77.89 \text{ ㎡} < 1426.67 \times 10\% = 142.67 \text{ ㎡} \dots \text{OK}$
 陽台+梯廳外挑斜頂面複檢計
 $134.14 + 77.89 = 212.03 \text{ ㎡} < 1426.67 \times 15\% = 214.00 \text{ ㎡} \dots \text{OK}$
 設備間面複檢計
 $132.9+19.13+22.99+5.58=180.6 \text{ ㎡}$
 電器房複檢地坑面複檢計
 $1426.67 - 77.89 - 180.6 = 1168.18 \text{ ㎡}$
 (初測) (驗收)

四 緊急升降機設置檢討

本廠A,B,C棟及21層,高74.45M;D棟19層,高67.65M;廠房三座並含升降機,總面積達十萬人,建築每分鐘105公尺

A, B 棟 (11~21 層) - 設置垂直升降機
 $(86.31+79.95+68.11+66.77+79.85+94.57) \times 11 = 5231.16 > 500 \text{ 噸}$

C 棟 (11~21 層) - 設置垂直升降機
 $(92.16+88.77) \times 11 = 1990.23 \text{ 噸} > 500 \text{ 噸}$

D 棟 (11~19 層) - 設置垂直升降機
 $(96.98+101.87) \times 3 + (96.98+91.70) \times 6 = 1728.63 \text{ 噸} > 500 \text{ 噸}$

F 棟 (11~13 層) - 無設置
 $(79.21+79.95) \times 3 = 477.48 \text{ 噸} < 500 \text{ 噸}$

G 棟 (11~13 層) - 無設置
 $(67.42+67.13) \times 3 = 403.65 < 500 \text{ 噸}$

A、B棟 $3.76 \times 2.68 = 10.08 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$
C棟 $4.5 \times 2.39 + 1.45 \times 0.4 = 11.34 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$
D棟 $2.45 \times 4.085 + 1.15 \times 1.425 = 11.65 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$

A, B棟 $(17.36+17.25+10.08)=44.69\text{m}$
 $> (77.83+71.87+59.98+58.64+71.44+85.35)\times 3\%=12.75\text{m}$
 C棟 $(31.07+11.34)=42.41\text{m}$ $> (82.94+78.75)\times 3\%=4.85\text{m}$
 D棟 $(25.51+11.65)=37.16\text{m}$ $> (89.55+93.27)\times 3\%=5.48\text{m}$

順序	算式	結果
A1	$1.25 \times 0.45 + 1.575 \times 2.17 + 1.65 \times 2.725$	= 8.48
A2	$1.675 \times 2.175 + 1.675 \times 2.325$	= 7.54
A3	$1.775 \times 2.1 + 2.75 \times 1.6$	= 8.13
B1	$1.775 \times 2.1 + 2.75 \times 1.6$	= 8.13
B2	$1.5 \times 2.65 + 1.675 \times 2.65$	= 8.41
B3	$1.625 \times 2.1 + 1.6 \times 3.325$	= 9.22
C1	$1.625 \times 2.1 + 1.6 \times 3.325$	= 9.22
C2	$3.355 \times 1.6 + 2.695 \times 1.725$	= 10.02
D1	$2.3 \times 1.675 + 1.625 \times 2.2$	= 7.43
D2	2.235×3.85	= 8.60
E1	2.235×3.85	= 8.60
E2	$1.675 \times 0.35 + 1.81 \times 4.1 + 0.415 \times 2.36$	= 8.99
F1	$1.885 \times 2.025 + 1.825 \times 2.2$	= 7.83
F2	$1.675 \times 2.675 + 3.825 \times 1.325$	= 9.55

居室面积		
A1	86.31-8.48	= 77.83
A2	77.6-7.54	= 70.06
A3	68.86-8.13	= 60.73
B1	66.77-8.13	= 58.64
B2	79.85-8.41	= 71.44
B3	94.57-9.22	= 85.35
C1	92.16-9.22	= 82.94
C2	88.77-10.02	= 78.75
D1	96.98-7.43	= 89.55
D2	101.87-8.60	= 93.27
E1	79.21-8.60	= 70.61
E2	79.95-8.99	= 70.96
F1	67.42-7.83	= 59.59
F2	67.13-9.55	= 57.58

圖11-30 十二層面積計算圖($S=1/300$)

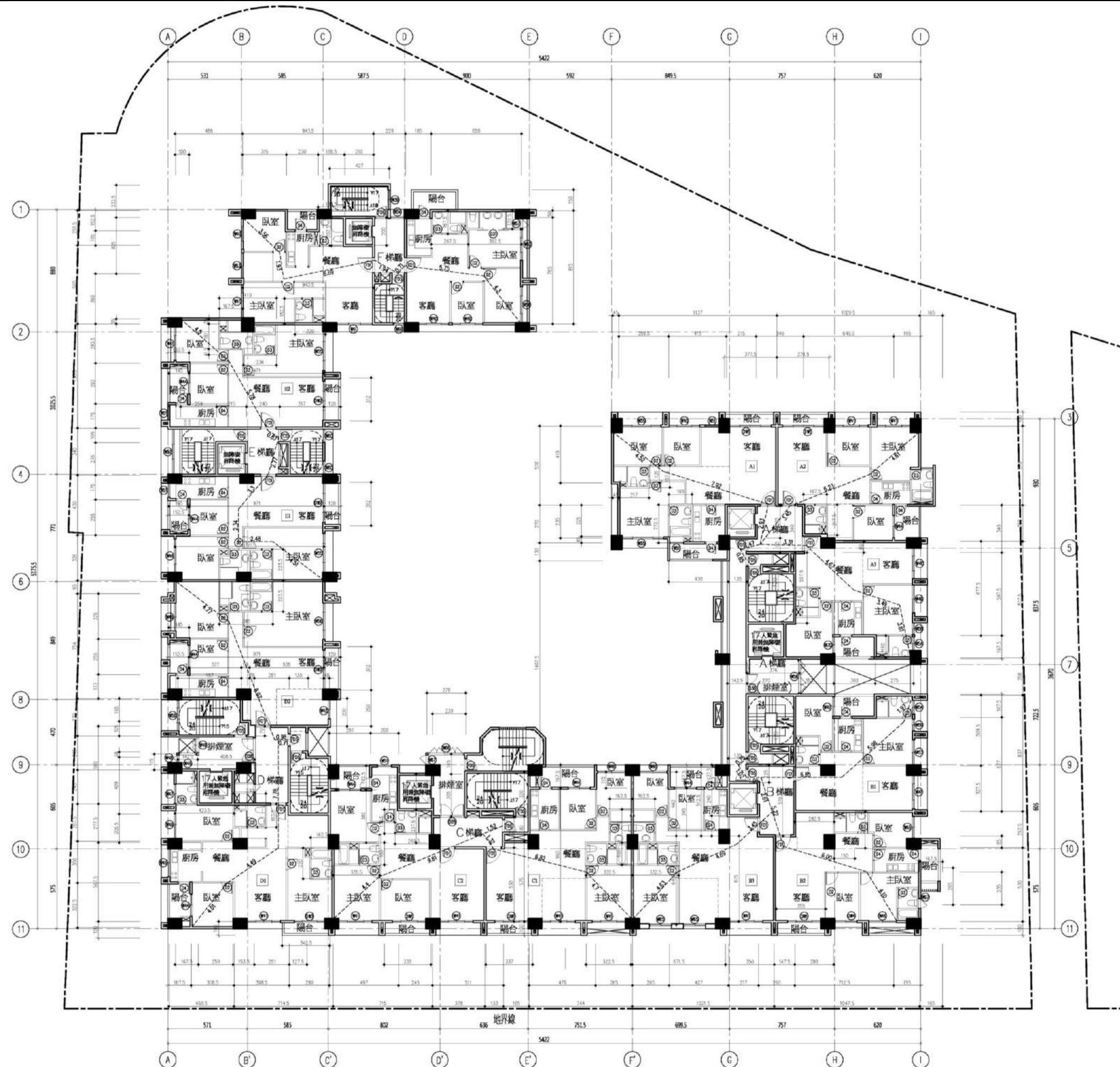
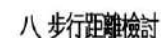


圖11-31 十三層平面圖(S=1/300)



九 採光面積検討

 露台
 安全梯
 梯廳
 排煙室
 緊急升降機
 一般升降機
 管道

一、十三層 各戶 樓地板面積計算

A1	$1.0 \times 3.775 + 4.3 \times 1.3$	=	9.37
A2	$3.795 \times 1.0 + 1.95 \times 2.6$	=	8.87
A3	3×1.675	=	5.03
B1	3×1.675	=	5.03
B2	$1.35 \times 3.0 + 3.55 \times 1.0$	=	7.60
B3	4.27×1.675	=	7.15
C1	$3.68 \times 1.675 + 1.11 \times 1.6 + 3.37 \times 1.0$	=	11.31
C2	$2.97 \times 1.8 + 1.0 \times 3.35$	=	8.70
D1	$3.225 \times 1.675 + 1.0 \times 3.425$	=	8.83
D2	$1.525 \times 2.55 + 3.12 \times 1.2$	=	7.63
E1	$1.525 \times 2.55 + 3.12 \times 1.2$	=	7.63
E2	$2.92 \times 1.525 + 3.12 \times 1.2$	=	8.20
F1	2.3×1.525	=	3.51
F2	$2 \times 1.425 + 1.925 \times 1.5$	=	5.74
A,B	$0.35 \times 1.5 + 1.35 \times 1.3 + 1.425 \times 1.675 + 1.35 \times 1.275$	=	24.91
D	1.35×1.85	=	2.50
小计:		=	132.01

梯面面积计算		
A梯	$0.65 \times 1.05 + 3.4 \times 3.4 + 3.76 \times 2.68$	= 22.32 m ²
B梯	$0.82 \times 1.25 + 5.1 \times 2.6$	= 14.29 m ²
C梯	$2.25 \times 5.11 + 4.5 \times 2.39 + 1.45 \times 0.4$	= 22.83 m ²
D梯	5.6×2.51	= 14.06 m ²
E梯	2.4×3.4	= 8.16 m ²
F梯	2.29×4.05	= 9.27 m ²
小计:		= 90.93 m ²

按墙不足2M而计算		
A楼	0.65x1.05	= 0.68㎡
B楼	0.82x1.25	= 1.03㎡
C楼	1.45x0.4	= 0.58㎡
小计:		= 2.29㎡

楼梯面计算		
A梯	5.075×3.42	$= 17.36 \text{ m}^2$
B梯	5.045×3.42	$= 17.25 \text{ m}^2$
C梯	$1.11 \times 1.3 + 2.43 \times 3.46 + (4.57 + 3.13) \times 0.72 / 2$ $+ 1.11 \times 1.98 + 4.57 \times 3.2 + 1.8 \times 1.85$	$= 32.77 \text{ m}^2$
D梯	$2.7 \times 4.57 + 0.59 \times 1.05 + 0.35 \times 0.7 + 1.275 \times 0.38$ $+ 4.09 \times 2.89$	$= 25.51 \text{ m}^2$
E梯	$3.4 \times 2.59 + 2.15 \times 1.05 + 3.4 \times 3.17$	$= 21.84 \text{ m}^2$
F梯	$2.325 \times 4.27 + 2.29 \times 3.6$	$= 18.17 \text{ m}^2$
小计:		$= 132.9 \text{ m}^2$

升降機面積計算		
A樓	2.35×2.15	= 5.05 m^2
B樓	2.4×2.17	= 5.21 m^2
E樓	2.35×2.15	= 5.05 m^2
F樓	2.1×2	= 4.20 m^2
小計		= 19.51 m^2

A、B樓 2.7x2.5	=	6.75 m ²
C樓 2.45x2.55	=	6.25 m ²
D樓 2.5x2.45	=	6.13 m ²
小計:	=	19.13 m ²

排煙室面積計算		
D樓	$2.45 \times 4.085 + 1.425 \times 1.15$	= 11.65 m^2
小計:		= 11.65 m^2

設備可面積計算	
A,B棟 $0.55 \times 1.65 \times 2$	= 1.82 m^2
D棟 1.535×2.45	= 3.76 m^2
小計:	= 5.58 m^2

二、面積計算檢討

樓地板面積檢討
 $1146.96+90.93+132.9+19.51+19.13+11.65+5.58 = 1426.66 \text{ m}^2$
 隔合夾心柱容積面積檢討
 $132.01 \text{ m}^2 < 1426.67 \times 10\% = 142.67 \text{ m}^2 \dots \text{OK}$
 柱牆夾心柱容積面積檢討
 $90.93 - 1.71 = 89.22 \text{ m}^2 < 1426.67 \times 10\% = 142.67 \text{ m}^2 \dots \text{OK}$
 隔合+柱牆夾心柱容積面積檢討
 $132.01 + 89.22 = 221.23 \text{ m}^2 > 1426.67 \times 15\% = 214.00 \text{ m}^2 \dots \text{OK}$
 $221.23 - 214.00 = 7.23 \text{ m}^2$ (計入容積獎勵)
 設備房面積檢討
 $132.9+19.13+11.65+5.58=169.26 \text{ m}^2$
 建築容積樓地板面積檢討
 $1426.66-89.22-169.26+7.23=1175.41 \text{ m}^2$
 (備註) (獎勵) (隔合+隔合獎勵 5%容積)

三、當層戶數檢討 14戶

四、緊急升降機設置檢討

本標A、B、C標21區 高度74.45M起算；D標9區 高度75.65M起算，
該標置三號燈高10公尺，照度能力十人，燈面面積0.05公尺

A、B標 (11~21區) — 設置緊急事件廣播
 $(86.31+79.95+68.11+66.77+79.85+94.57) \times 11 = 5231.16 > 500\text{W}$

C標 (11~21區) — 設置緊急事件廣播 $(92.16+88.77) \times 11 = 1990.23\text{W} > 500\text{W}$

D標 (11~19區) — 設置緊急事件廣播
 $(96.98+101.87) \times 3 + (96.98+91.70) \times 6 = 1728.63\text{W} > 500\text{W}$

E標 (11~13區) — 免設置 $(79.21+79.13) \times 3 = 477.48 < 500\text{W}$

F標 (11~13區) — 免設置 $(67.42+67.13) \times 3 = 403.65 < 500\text{W}$

五、排煙室面積檢討

A、B棟 $3.76 \times 2.68 = 10.08 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$
 C棟 $4.5 \times 2.39 + 1.45 \times 0.4 = 11.34 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$
 D棟 $2.45 \times 4.085 + 1.15 \times 1.425 = 11.65 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$

六 特別安全梯面積檢討

A、B 棟 $(17.36+17.25+10.08)=44.69\text{m}$
 $> (77.83+71.87+59.98+58.64+71.44+85.35)\times 3\% = 12.75\text{m}$
 C 棟 $(31.07+11.34)=42.41\text{m}$ $> (82.94+78.75)\times 3\% = 4.85\text{m}$
 D 棟 $(25.51+11.65)=37.16\text{m}$ $> (89.55+93.27)\times 3\% = 5.48\text{m}$

七 居室面積計算

順序	計算式	結果
A1	$1.25 \times 0.45 + 1.575 \times 2.17 + 1.65 \times 2.725$	= 8.48 ㊦
A2	$1.675 \times 2.175 + 1.675 \times 2.325$	= 7.54 ㊦
A3	$1.775 \times 2.1 + 2.75 \times 1.6$	= 8.13 ㊦
B1	$1.775 \times 2.1 + 2.75 \times 1.6$	= 8.13 ㊦
B2	$1.5 \times 2.65 + 1.675 \times 2.65$	= 8.41 ㊦
B3	$1.625 \times 2.4 + 1.6 \times 3.325$	= 9.22 ㊦
C1	$1.625 \times 2.4 + 1.6 \times 3.325$	= 9.22 ㊦
C2	$3.355 \times 1.6 + 2.695 \times 1.725$	= 10.02 ㊦
D1	$2.3 \times 1.675 + 1.625 \times 2.2$	= 7.43 ㊦
D2	2.235×3.85	= 8.60 ㊦
E1	2.235×3.85	= 8.60 ㊦
E2	$1.675 \times 0.35 + 1.81 \times 4.1 + 0.415 \times 2.36$	= 8.99 ㊦
F1	$1.885 \times 2.025 + 1.825 \times 2.2$	= 7.83 ㊦
F2	$1.675 \times 2.675 + 3.825 \times 1.325$	= 9.55 ㊦

A1	86.31-8.48	=	77.83 #
A2	77.6-7.54	=	70.06 #
A3	68.86-8.13	=	60.73 #
B1	66.77-8.13	=	58.64 #
B2	79.85-8.41	=	71.44 #
B3	94.57-9.22	=	85.35 #
C1	92.16-9.22	=	82.94 #
C2	88.77-10.02	=	78.75 #
D1	96.98-7.43	=	89.55 #
D2	101.87-8.60	=	93.27 #
E1	79.21-8.60	=	70.61 #
E2	79.95-8.99	=	70.96 #
F1	67.42-7.83	=	59.59 #
F2	67.13-9.55	=	57.58 #

圖11-32 十三層面積計算圖(S=1/300)

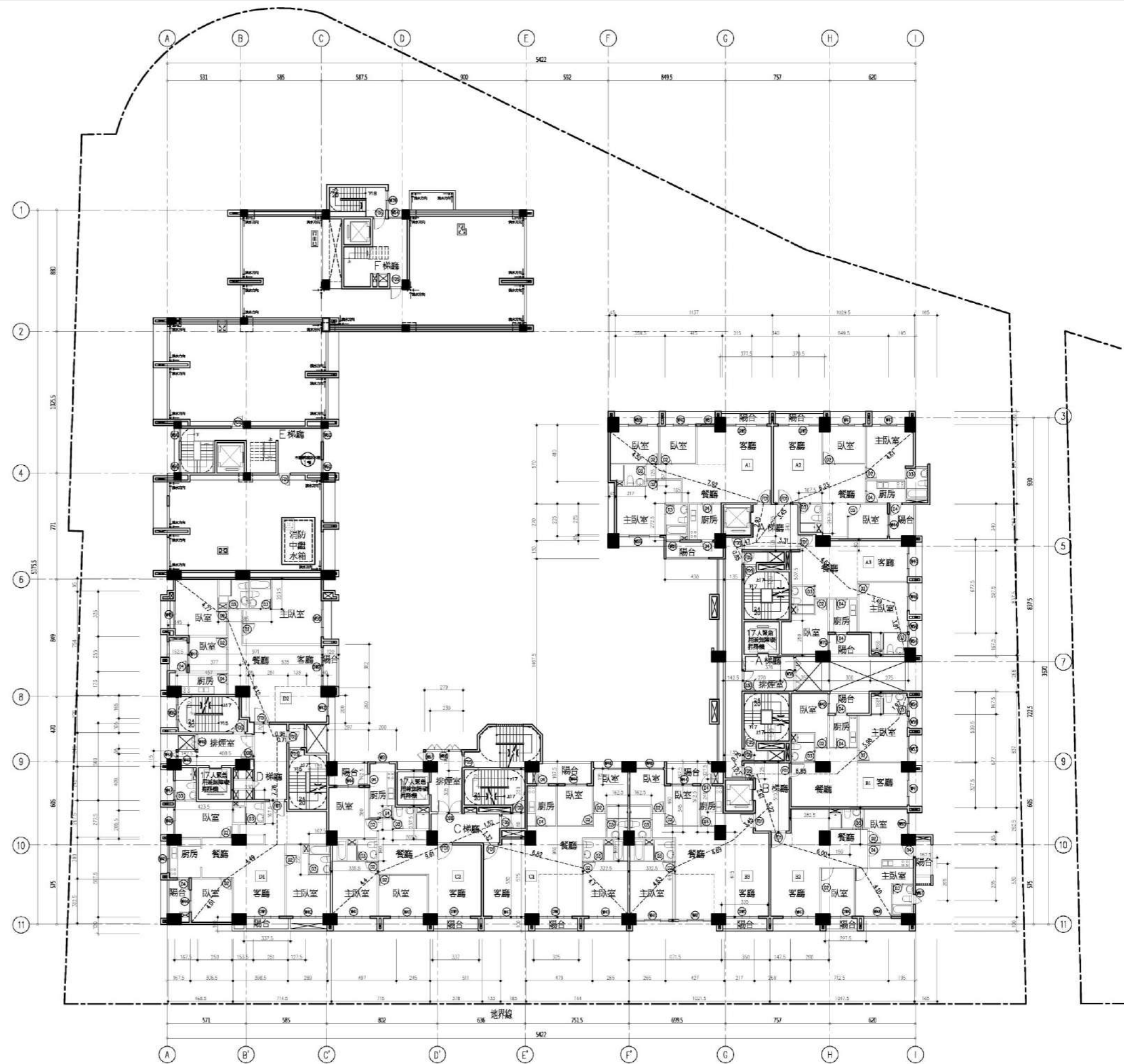
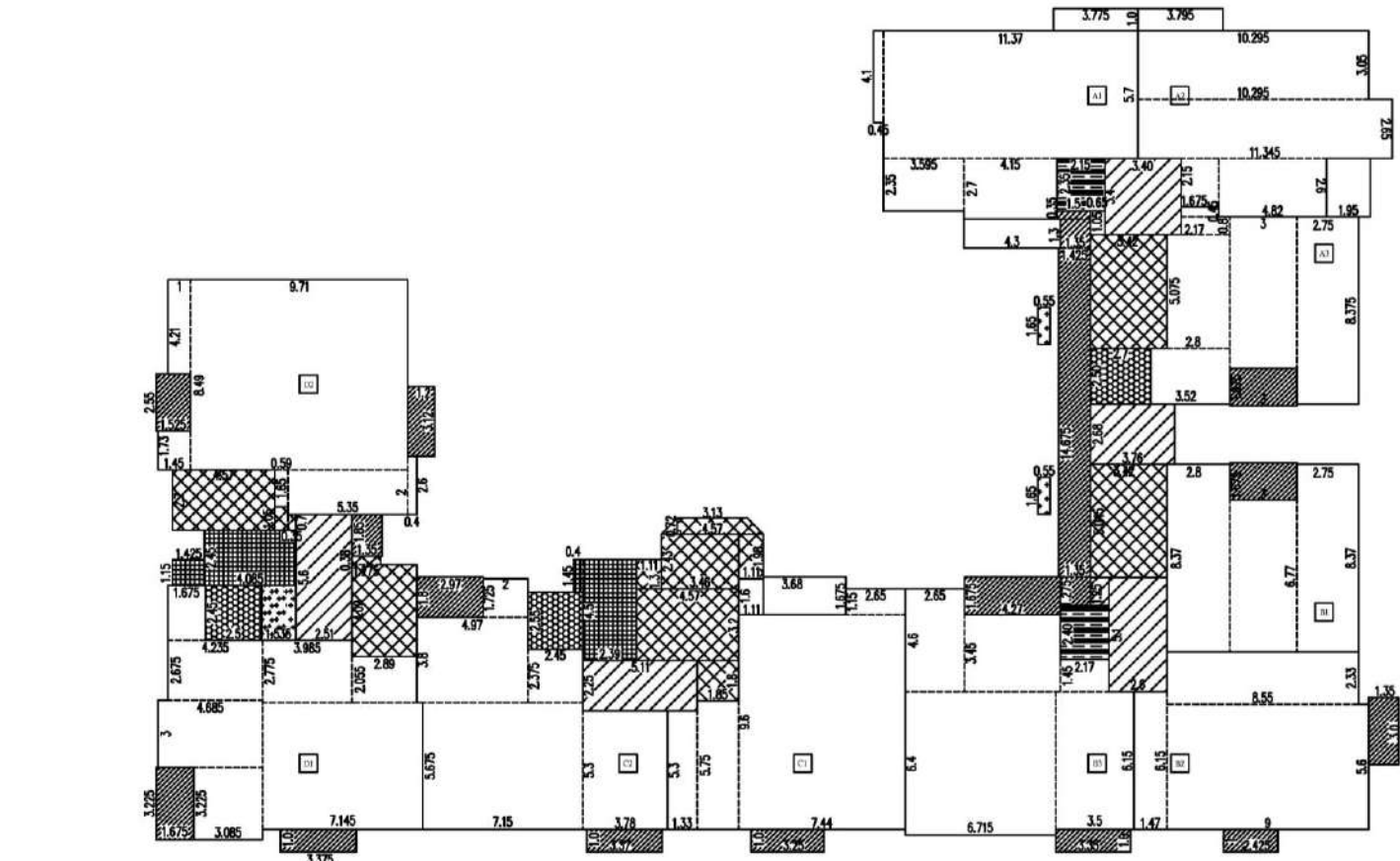


圖11-33 十四層平面圖(S=1/300)



八、步行距離檢討

步行距離

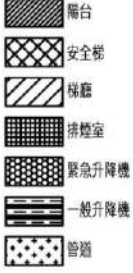
A1	$L=4.52+7.92+2.93+1.47+0.85=17.69M < 40M$
A2	$L=4.61+6.23+3.45+1.47+0.85=16.61M < 40M$
A3	$L=3.81+3.49+4.67+3.31+1.47+0.85=17.6M < 40M$
B1	$L=1.97+5.98+6.85+1.02+0.75=16.57M < 40M$
B2	$L=4.6+6.55+5.22+1.05+1.02+0.75=19.19M < 40M$
B3	$L=4.63+4.69+3.45+2.61+1.05+1.02+0.75=18.2M < 40M$
C1	$L=4.7+6.82+1.32+1.52=14.36M < 40M$
C2	$L=9.61+4.4=14.01M < 40M$
D1	$L=4.01+4.49+7.78+0.71=16.99M < 40M$
D2	$L=4.77+9.12+0.98=14.87M < 40M$

重複步行距離

A1	$L=4.52+7.92+2.93+1.47+0.85=17.69M < 20M$
A2	$L=4.61+6.23+3.45+1.47+0.85=16.61M < 20M$
A3	$L=4.46+2.57+4.63+2.48+1.47+0.85=16.46M < 20M$
B1	$L=4.57+2.96+7.69+1.02+0.75=16.99M < 20M$
B2	$L=4.6+6.55+5.22+1.05+1.02+0.75=19.19M < 20M$
B3	$L=4.63+4.69+3.45+2.61+1.05+1.02+0.75=18.2M < 20M$
C1	$L=4.7+6.82+1.32+1.52=14.36M < 20M$
C2	$L=9.61+4.4=14.01M < 20M$
D1	$L=4.01+4.49+7.78+0.71=16.99M < 20M$
D2	$L=4.58+8.07+0.98=13.63M < 20M$

九、採光面積檢討

A1	$2.4 \times 2.5 + 1 \times 1.75 + 2.2 \times 2.5 + 2.8 \times 2.5 + 2.8 \times 2.5 + 1 \times 1.75 = 29.00 \text{ m}^2 > 77.83/8 = 9.73 \dots \text{OK}$
A2	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 0.9 \times 1.3 + 1.6 \times 1.5 = 21.57 \text{ m}^2 > 70.06/8 = 8.76 \dots \text{OK}$
A3	$2.2 \times 2.5 + 2 \times 2.5 + 0.84 \times 2.5 + 1 \times 2.5 + 1.2 \times 1.5 = 16.90 \text{ m}^2 > 60.73/8 = 7.59 \dots \text{OK}$
B1	$2.4 \times 2.5 + 1.8 \times 2.5 + 0.84 \times 2.5 + 1 \times 2.5 + 1.4 \times 1.5 = 17.20 \text{ m}^2 > 58.64/8 = 7.33 \dots \text{OK}$
B2	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.2 \times 2.5 + 1.4 \times 1.8 + 1 \times 1.75 + 1.6 \times 1.4 = 24.01 \text{ m}^2 > 71.44/8 = 8.93 \dots \text{OK}$
B3	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 2 \times 2.5 + 1.6 \times 1.5 = 25.40 \text{ m}^2 > 85.35/8 = 10.67 \dots \text{OK}$
C1	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 2 \times 2.5 + 1.6 \times 1.5 = 25.40 \text{ m}^2 > 82.94/8 = 10.37 \dots \text{OK}$
C2	$2.4 \times 2.5 + 2.4 \times 2.5 + 2.4 \times 2.5 + 1.6 \times 1.5 + 1 \times 1.75 = 22.15 \text{ m}^2 > 78.75/8 = 9.84 \dots \text{OK}$
D1	$2.2 \times 2.5 + 2.4 \times 2.5 + 1.6 \times 1.5 + 2 \times 1.5 + 2 \times 2.5 + 1.4 \times 2.5 = 25.40 \text{ m}^2 > 89.55/8 = 11.19 \dots \text{OK}$
D2	$1.4 \times 1.5 + 2.8 \times 2.5 + 2.6 \times 2.5 + 2 \times 1.5 + 1.6 \times 1.5 = 21.00 \text{ m}^2 > 83.10/8 = 10.39 \dots \text{OK}$



一、十四層 各戶 樓地板面積計算

室內面積		
A1	$4.1 \times 0.45 + 3.595 \times 2.35 + 5.7 \times 1.37 + 4.15 \times 2.7$	$= 86.31 \text{ m}^2$
A2	$10.295 \times 3.05 + 11.345 \times 2.65 + 1.675 \times 2.15 + 2.6 \times 4.82$	$= 77.60 \text{ m}^2$
A3	$0.8 \times 2.17 + 2.8 \times 5.075 + 2.5 \times 3.52 + 6.775 \times 3 + 8.375 \times 2.75 + 0.45 \times 1.675$	$= 68.86 \text{ m}^2$
B1	$8.37 \times 2.8 + 6.77 \times 3 + 2.75 \times 8.37$	$= 66.77 \text{ m}^2$
B2	$6.15 \times 1.47 + 8.55 \times 2.33 + 5.6 \times 9$	$= 79.36 \text{ m}^2$
B3	$4.6 \times 2.65 + 4.27 \times 3.45 + 6.715 \times 6.4 + 1.45 \times 2.17 + 3.5 \times 6.15$	$= 94.57 \text{ m}^2$
C1	$1.85 \times 5.75 + 5.3 \times 1.33 + 7.44 \times 9.6 + 1.15 \times 2.65$	$= 92.16 \text{ m}^2$
C2	$2 \times 1.725 + 3.8 \times 4.97 + 2.45 \times 2.375 + 7.15 \times 5.675 + 3.78 \times 5.3$	$= 88.77 \text{ m}^2$
D1	$1.675 \times 2.45 + 2.675 \times 4.235 + 3 \times 4.685 + 3.985 \times 2.775 + 3.225 \times 3.085 + 2.89 \times 2.055 + 7.145 \times 5.675$	$= 96.98 \text{ m}^2$
D2	$3.26 \times 1 + 1.73 \times 1.45 + 7.54 \times 9.71 + 0.59 \times 1.65 + 5.35 \times 2 + 2.6 \times 0.4$	$= 91.70 \text{ m}^2$
小計:		$= 843.08 \text{ m}^2$

陽合面積		
A1	$1.0 \times 3.775 + 4.3 \times 1.3$	$= 9.37 \text{ m}^2$
A2	$3.795 \times 1.0 + 1.95 \times 2.6$	$= 8.87 \text{ m}^2$
A3	3×1.675	$= 5.03 \text{ m}^2$
B1	3×1.675	$= 5.03 \text{ m}^2$
B2	$2.425 \times 1 + 3.0 \times 1.35$	$= 6.48 \text{ m}^2$
B3	$4.27 \times 1.675 + 3.35 \times 1.0$	$= 10.50 \text{ m}^2$
C1	$3.68 \times 1.675 + 1.11 \times 1.6 + 3.25 \times 1.0$	$= 11.19 \text{ m}^2$
C2	$2.97 \times 1.8 + 1.0 \times 3.37$	$= 8.72 \text{ m}^2$
D1	$3.225 \times 1.675 + 1.0 \times 3.425$	$= 8.83 \text{ m}^2$
D2	$1.525 \times 2.55 + 3.12 \times 1.2$	$= 7.63 \text{ m}^2$
A,B 樓	$0.35 \times 1.5 + 1.35 \times 1.3 + 1.425 \times 14.675 + 1.35 \times 1.275$	$= 24.91 \text{ m}^2$
D 樓	1.35×1.85	$= 2.50 \text{ m}^2$
小計:		$= 109.06 \text{ m}^2$

樓面面積計算		
A 樓	$0.65 \times 1.05 + 3.4 \times 3.4 + 3.76 \times 2.68$	$= 22.32 \text{ m}^2$
B 樓	$0.82 \times 1.25 + 5.1 \times 2.6$	$= 14.29 \text{ m}^2$
C 樓	2.25×5.11	$= 11.50 \text{ m}^2$
D 樓	5.6×2.51	$= 14.06 \text{ m}^2$
小計:		$= 62.17 \text{ m}^2$

樓面不足2M面積計算		
A 樓	0.65×1.05	$= 0.68 \text{ m}^2$
B 樓	0.82×1.25	$= 1.03 \text{ m}^2$
小計:		$= 1.71 \text{ m}^2$

樓面面積計算		
A 樓	5.075×3.42	$= 17.36 \text{ m}^2$
B 樓	5.045×3.42	$= 17.25 \text{ m}^2$
C 樓	$1.11 \times 1.3 + 2.43 \times 3.46 + (4.57 + 3.13) \times 0.72/2 + 1.11 \times 1.98 + 4.57 \times 3.2 + 1.8 \times 1.85$	$= 32.77 \text{ m}^2$
D 樓	$2.7 \times 4.57 + 0.59 \times 1.05 + 0.35 \times 0.7 + 1.275 \times 0.38 + 4.09 \times 2.89$	$= 25.51 \text{ m}^2$
小計:		$= 92.89 \text{ m}^2$

升降機面積計算		
A 樓	2.35×2.15	$= 5.05 \text{ m}^2$
B 樓	2.4×2.17	$= 5.21 \text{ m}^2$
小計:		$= 10.26 \text{ m}^2$

緊急升降機面積計算		
A,B 樓	2.7×2.5	$= 6.75 \text{ m}^2$
C 樓	2.45×2.55	$= 6.25 \text{ m}^2$
D 樓	2.5×2.45	$= 6.13 \text{ m}^2$
小計:		$= 19.13 \text{ m}^2$

排煙室面積計算		
C 樓	$1.45 \times 2.79 + 2.39 \times 3.05$	$= 11.34 \text{ m}^2$
D 樓	$2.45 \times 4.085 + 1.425 \times 1.15$	$= 11.65 \text{ m}^2$
小計:		$= 22.99 \text{ m}^2$

設備間面積計算		
A,B 樓	$0.55 \times 1.65 \times 2$	$= 1.82 \text{ m}^2$
D 樓	1.535×2.45	$= 3.76 \text{ m}^2$
小計:		$= 5.58 \text{ m}^2$

二、面積計算檢討

樓地板面積檢討	$843.08 + 62.17 + 92.89 + 10.26 + 19.13 + 22.99 + 5.58 = 1056.10 \text{ m}^2$
陽合免計容積面積檢討	$109.06 \text{ m}^2 > 1056.10 \times 10\% = 105.61 \text{ m}^2$
樓面免計容積面積檢討	$109.06 - 105.61 = 3.45 \text{ m}^2$ (計入容積獎勵)
樓面免計容積面積檢討	$62.17 - 1.71 = 60.46 \text{ m}^2 < 1056.10 \times 10\% = 105.61 \text{ m}^2 \dots \text{OK}$
陽合+樓面免計容積面積檢討	$109.06 + 60.46 = 169.52 \text{ m}^2 > 1056.10 \times 15\% = 158.42 \text{ m}^2$
設備間免計容積面積檢討	$169.52 - 158.42 = 11.10 \text{ m}^2$ (計入容積獎勵)
設備間免計容積面積檢討	$92.89 + 19.13 + 22.99 + 5.58 = 140.59 \text{ m}^2$
當層容積樓地板面積檢討	$(\text{陽合免計} 10\% \text{ 部分})$
	$1059.55 - 60.46 - 140.59 + 11.10 + 3.45 = 873.05 \text{ m}^2$
	(備註) (設備間) (陽合+陽合免計 5% 部分)

三、當層戶數檢討 10 戶

四、緊急升降機設置檢討

本樓A,B,C 樓為21 層, 高度74.45M 超過; D 樓為19 層, 高度67.65M 超過, 故設置三部緊急升降機, 每部服務層十七人, 服務層分別 05 公尺

A,B 樓 (11~21 層) - 設置緊急升降機	$(86.31 + 79.95 + 68.11 + 66.77 + 79.85 + 94.57) \times 11 = 5231.16 > 500 \text{ m}^2$
C 樓 (11~21 層) - 設置緊急升降機	$(92.16 + 88.77) \times 11 = 1990.23 \text{ m}^2 > 500 \text{ m}^2$
D 樓 (11~19 層) - 設置緊急升降機	$(96.98 + 101.87) \times 3 + (96.98 + 91.70) \times 6 = 1728.63 \text{ m}^2 > 500 \text{ m}^2$
E 樓 (11~13 層) - 免設置	$(79.21 + 79.95) \times 3 = 477.48 \text{ m}^2 < 500 \text{ m}^2$
F 樓 (11~13 層) - 免設置	$(67.42 + 67.13) \times 3 = 403.65 \text{ m}^2 < 500 \text{ m}^2$

五、排煙室面積檢討

A,B 樓	$3.76 \times 2.68 = 10.08 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$
C 樓	$4.5 \times 2.39 + 1.45 \times 0.4 = 11.34 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$
D 樓	$2.45 \times 4.085 + 1.15 \times 1.425 = 11.65 \text{ m}^2 > 10.00 \text{ m}^2 \dots \text{OK}$

六、特別安全梯面積檢討

A,B 樓	$(17.36 + 17.25 + 10.08) = 44.69 \text{ m}^2$
>	$(77.83 + 71.87 + 59.98 + 58.64 + 71.44 + 85.35) \times 3\% = 12.75 \text{ m}^2$
C 樓	$(31.07 + 11.34) = 42.41 \text{ m}^2 > (82.94 + 78.75) \times 3\% = 4.85 \text{ m}^2$
D 樓	$(25.51 + 11.65) = 37.16 \text{ m}^2 > (89.55 + 83.10) \times 3\% = 5.18 \text{ m}^2$

七、居室面積計算

廁所面積		
A1	$1.25 \times 0.45 + 1.575 \times 2.17 + 1.65 \times 2.725$	$= 8.48 \text{ m}^2$
A2	$1.675 \times 2.175 + 1.675 \times 2.325$	$= 7.54 \text{ m}^2$
A3	$1.775 \times 2.1 + 2.75 \times 1.6$	$= 8.13 \text{ m}^2$
B1	$1.775 \times 2.1 + 2.75 \times 1.6$	$= 8.13 \text{ m}^2$
B2	$1.5 \times 2.65 + 1.675 \times 2.65$	$= 8.41 \text{ m}^2$
B3	$1.625 \times 2.4 + 1.6 \times 3.325$	$= 9.22 \text{ m}^2$
C1	$1.625 \times 2.4 + 1.6 \times 3.325$	$= 9.22 \text{ m}^2$
C2	$3.355 \times 1.6 + 2.695 \times 1.725$	$= 10.02 \text{ m}^2$
D1	$2.3 \times 1.675 + 1.625 \times 2.2$	$= 7.43 \text{ m}^2$
D2	2.235×3.85	$= 8.60 \text{ m}^2$

居室面積		
A1	$86.31 - 8.48$	$= 77.83 \text{ m}^2$
A2	$77.6 - 7.54$	$= 70.06 \text{ m}^2$
A3	$68.86 - 8.13$	$= 60.73 \text{ m}^2$
B1	$66.77 - 8.13$	$= 58.64 \text{ m}^2$
B2	$79.85 - 8.41$	$= 71.44 \text{ m}^2$
B3	$94.57 - 9.22$	$= 85.35 \text{ m}^2$
C1	$92.16 - 9.22$	$= 82.94 \text{ m}^2$
C2	$88.77 - 10.02$	$= 78.75 \text{ m}^2$
D1	$96.98 - 7.43$	$= 89.55 \text{ m}^2$
D2	$91.70 - 8.60$	$= 83.10 \text{ m}^2$

圖11-34 十四層面積計算圖(S=1/300)