

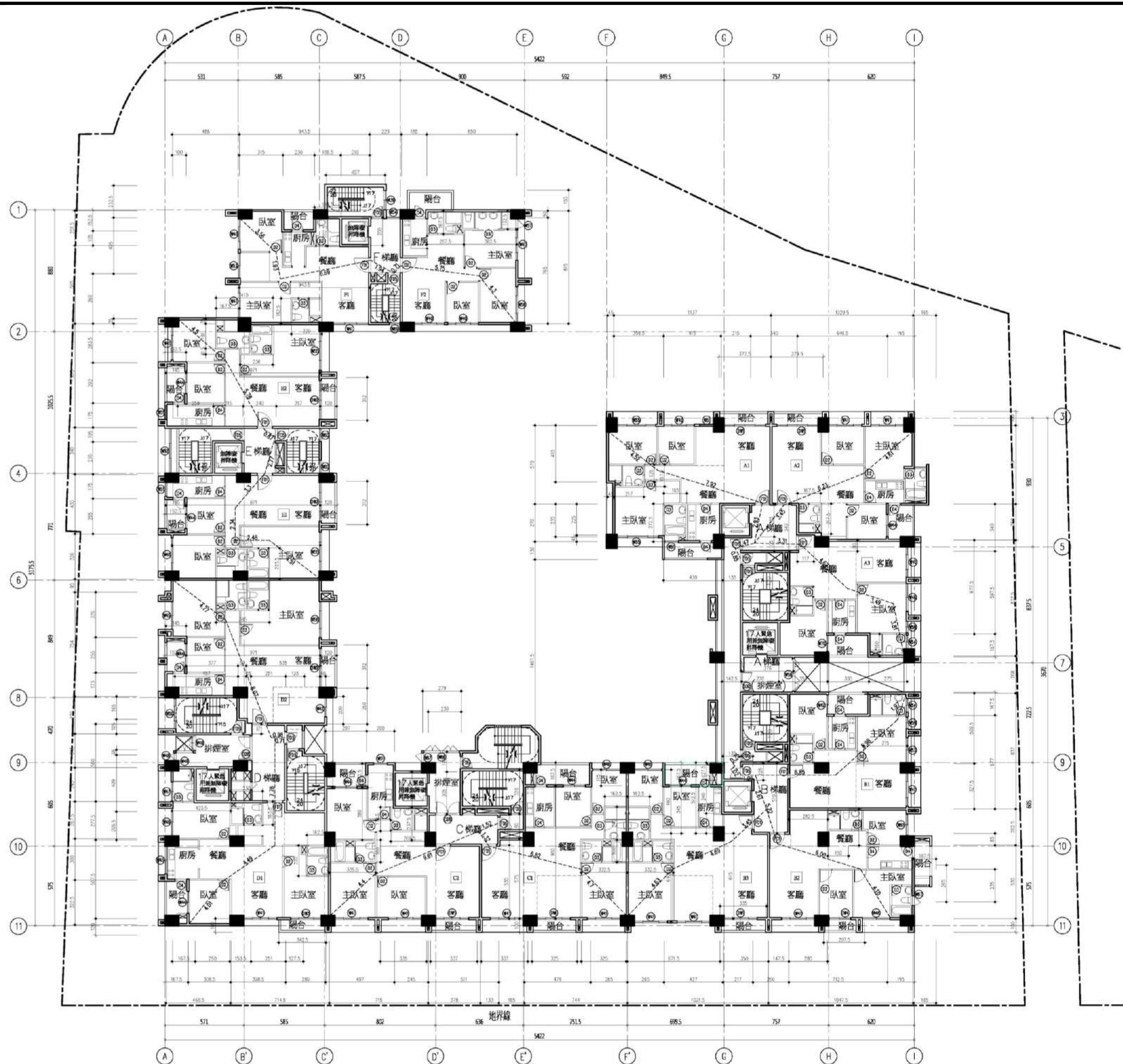


圖11-23 八層平面圖(S=1/300)



九 採光面積檢討

	陽台
	安全梯
	梯廳
	排煙室
	緊急升降梯
	一般升降梯
	雪道

設備面積計算	
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

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11-24 八層面積計算圖($S=1/300$)

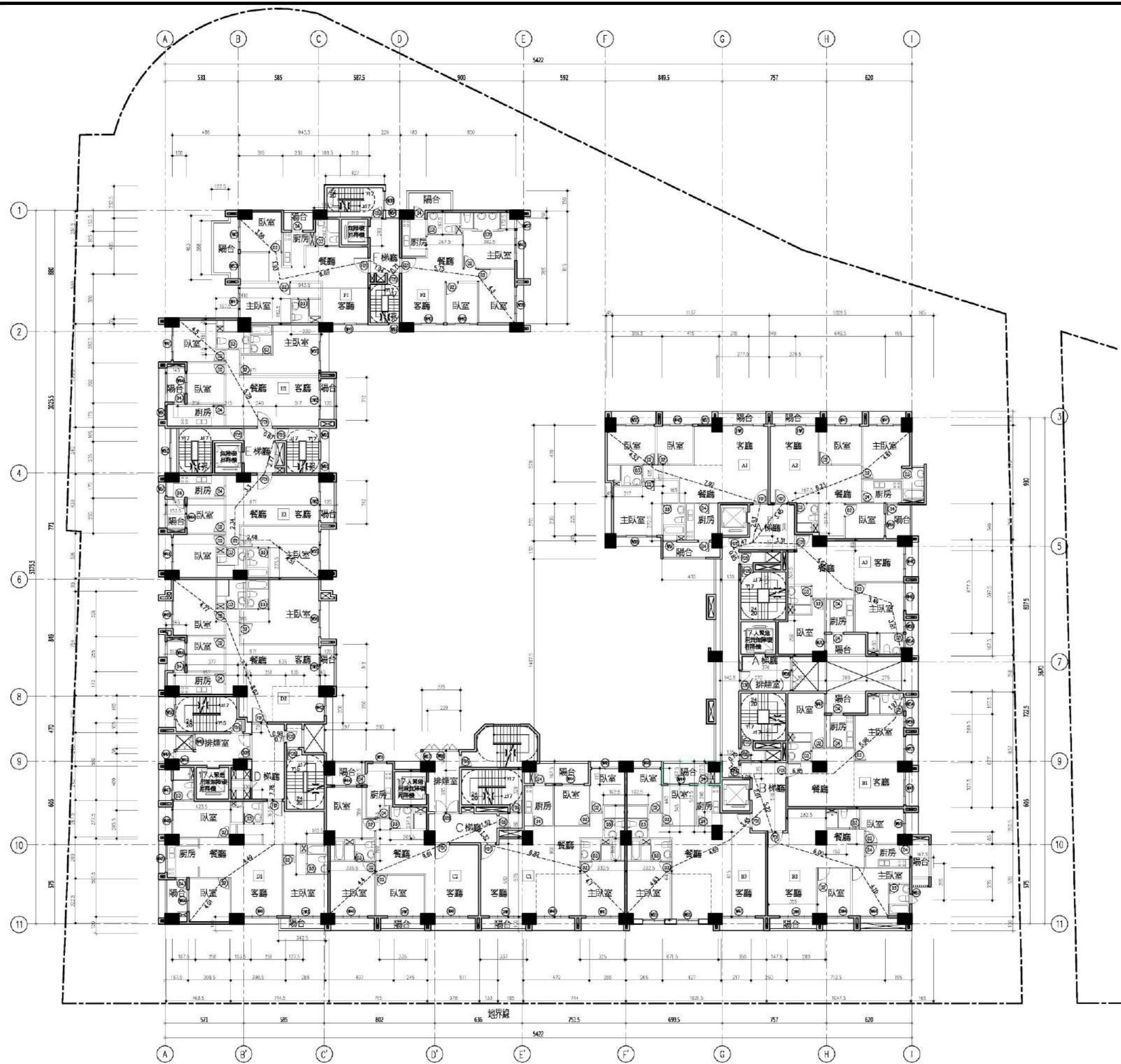
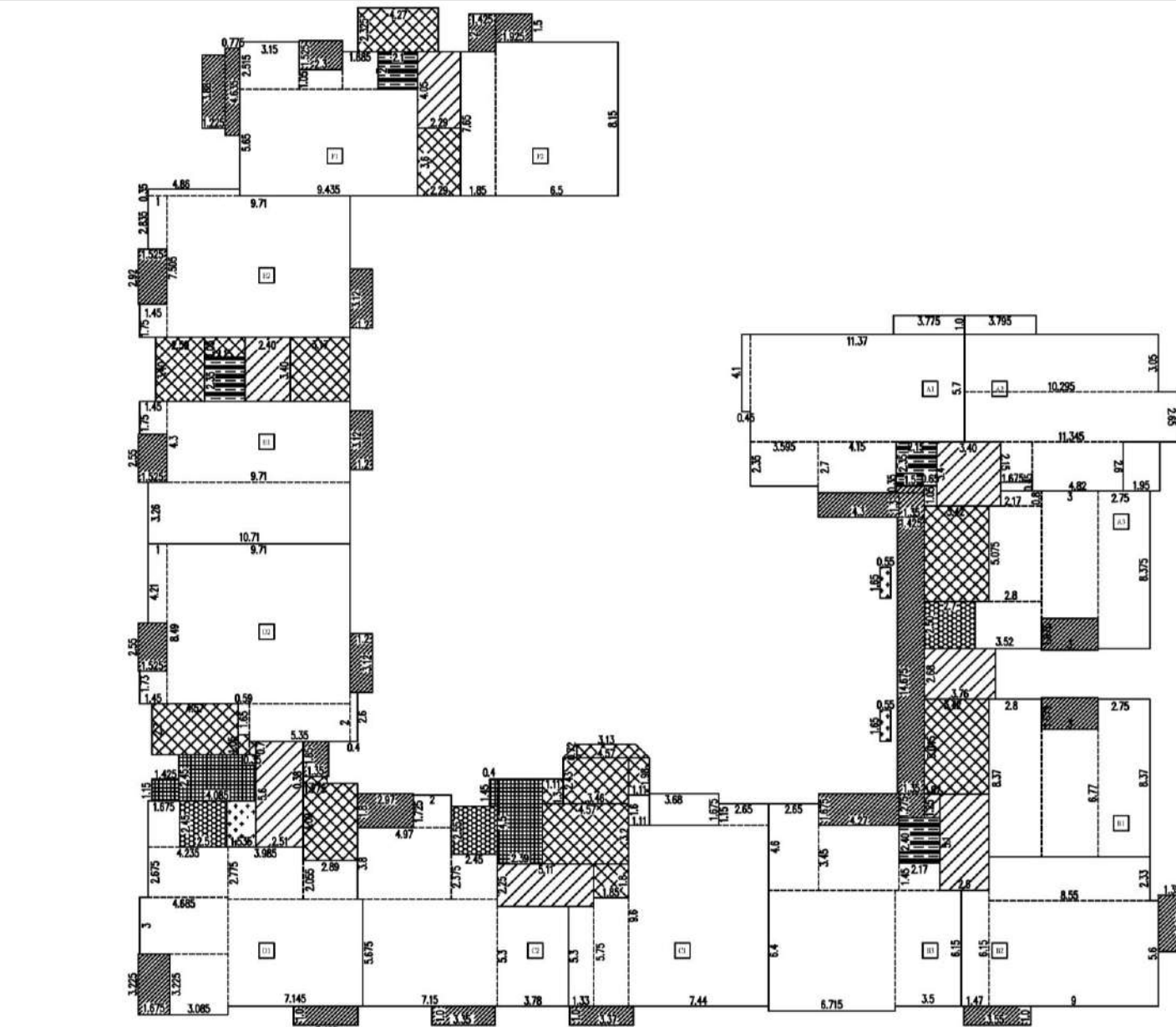


圖11-25 九層平面圖(S=1/300)

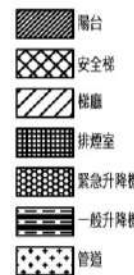


八 步行距離檢討

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	$L=4.77+9.12+0.98=14.87M < 40M$
E1	$L=4.51+2.48+2.34+3.3+2.77=15.4M < 50M$
E2	$L=4.5+5.78+0.87=11.15M < 50M$
F1	$L=3.56+1.93+6.69+1.94=14.12M < 50M$
F2	$L=4.3+5.75+0.71=10.76M < 50M$
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	$L=4.58+8.07+0.98=13.63M < 20M$
E1	$L=4.51+2.48+2.34+3.3=12.63M < 50M$
E2	$L=4.5+5.78=10.28M < 50M$
F1	$L=3.56+1.93+6.69+1.94=12.18M < 50M$
F2	$L=4.3+5.75+0.71=10.05M < 50M$

九 採光面積檢討

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



一、九層 各戶 樓地板面積計算

室內面積	
A1	$4.1 \times 0.45 + 3.595 \times 2.35 + 5.7 \times 1.37 + 4.15 \times 2.7 = 86.31M^2$
A2	$10.295 \times 3.05 + 11.345 \times 2.65 + 1.675 \times 2.15 + 2.6 \times 4.82 = 77.6M^2$
A3	$0.8 \times 2.17 + 2.8 \times 5.075 + 2.5 \times 3.52 + 6.775 \times 3 + 8.375 \times 2.75 + 0.45 \times 1.675 = 68.86M^2$
B1	$8.37 \times 2.8 + 6.77 \times 3 + 2.75 \times 3.37 = 66.77M^2$
B2	$6.15 \times 1.47 + 8.55 \times 2.33 + 5.6 \times 9 = 79.36M^2$
B3	$4.6 \times 2.65 + 4.27 \times 3.45 + 6.715 \times 6.4 + 1.45 \times 2.17 + 3.5 \times 6.15 = 94.57M^2$
C1	$1.85 \times 5.75 + 5.3 \times 1.33 + 7.44 \times 9.6 + 1.15 \times 2.65 = 92.16M^2$
C2	$2 \times 1.725 + 3.8 \times 4.97 + 2.45 \times 2.375 + 7.15 \times 5.675 + 3.78 \times 5.3 = 88.77M^2$
D1	$1.675 \times 2.45 + 2.675 \times 4.235 + 3 \times 4.685 + 3.985 \times 2.775 + 3.225 \times 3.085 + 2.89 \times 2.055 + 7.145 \times 5.675 = 96.98M^2$
D2	$4.21 \times 1 + 1.73 \times 1.45 + 8.49 \times 9.71 + 0.59 \times 1.65 + 5.35 \times 2 + 2.6 \times 0.4 = 101.87M^2$
E1	$1.75 \times 1.45 + 4.3 \times 9.71 + 10.71 \times 3.26 = 79.21M^2$
E2	$2.835 \times 1 + 4.86 \times 0.35 + 7.505 \times 9.71 + 1.75 \times 1.45 = 79.95M^2$
F1	$2.515 \times 3.15 + 2.3 \times 1.05 + 1.885 \times 2 + 9.435 \times 5.65 = 67.42M^2$
F2	$7.65 \times 1.85 + 6.5 \times 8.15 = 67.13M^2$
小計	$= 1146.96M^2$

陽台面積	
A1	$1.0 \times 3.775 + 4.3 \times 1.3 = 9.37M^2$
A2	$3.795 \times 1.0 + 1.95 \times 2.6 = 8.87M^2$
A3	$3 \times 1.675 = 5.03M^2$
B1	$3 \times 1.675 = 5.03M^2$
B2	$1.35 \times 3.0 + 3.55 \times 1.0 = 7.60M^2$
B3	$4.27 \times 1.675 = 7.15M^2$
C1	$3.68 \times 1.675 + 1.11 \times 1.6 + 3.37 \times 1.0 = 11.31M^2$
C2	$2.97 \times 1.8 + 1.0 \times 3.35 = 8.70M^2$
D1	$3.225 \times 1.675 + 1.0 \times 3.425 = 8.83M^2$
D2	$1.525 \times 2.55 + 3.12 \times 1.2 = 7.63M^2$
E1	$1.525 \times 2.55 + 3.12 \times 1.2 = 7.63M^2$
E2	$2.92 \times 1.525 + 3.12 \times 1.2 = 8.20M^2$
F1	$2.3 \times 1.525 + 1.225 \times 3.88 + 0.775 \times 4.635 = 11.85M^2$
F2	$2 \times 1.425 + 1.925 \times 1.5 = 5.74M^2$
A,B棟	$0.35 \times 1.5 + 1.35 \times 1.3 + 1.425 \times 14.675 + 1.35 \times 1.275 = 24.91M^2$
D棟	$1.35 \times 1.85 = 2.50M^2$
小計	$= 140.35M^2$

樓面面積計算	
A棟	$0.65 \times 1.05 + 3.4 \times 3.4 + 3.76 \times 2.68 = 22.32M^2$
B棟	$0.82 \times 1.25 + 5.1 \times 2.6 = 14.29M^2$
C棟	$2.25 \times 5.11 = 11.50M^2$
D棟	$5.6 \times 2.51 = 14.06M^2$
E棟	$2.4 \times 3.4 = 8.16M^2$
F棟	$2.29 \times 4.05 = 9.27M^2$
小計	$= 79.60M^2$

樓面不足2M面積計算	
A棟	$0.65 \times 1.05 = 0.68M^2$
B棟	$0.82 \times 1.25 = 1.03M^2$
小計	$= 1.71M^2$

樓梯面積計算	
A棟	$5.075 \times 3.42 = 17.36M^2$
B棟	$5.045 \times 3.42 = 17.25M^2$
C棟	$1.11 \times 1.3 + 2.43 \times 3.46 + (4.57 + 3.13) \times 0.72/2 + 1.11 \times 1.98 + 4.57 \times 3.2 + 1.8 \times 1.85 = 32.77M^2$
D棟	$2.7 \times 4.57 + 0.59 \times 1.05 + 0.35 \times 0.7 + 1.275 \times 0.38 + 4.09 \times 2.89 = 25.51M^2$
E棟	$3.4 \times 2.59 + 2.15 \times 1.05 + 3.4 \times 3.17 = 21.84M^2$
F棟	$2.325 \times 4.27 + 2.29 \times 3.6 = 18.17M^2$
小計	$= 132.9M^2$

升降機面積計算	
A棟	$2.35 \times 2.15 = 5.05M^2$
B棟	$2.4 \times 2.17 = 5.21M^2$
E棟	$2.35 \times 2.15 = 5.05M^2$
F棟	$2.1 \times 2 = 4.20M^2$
小計	$= 19.51M^2$

緊急升降機面積計算	
A,B棟	$2.7 \times 2.5 = 6.75M^2$
C棟	$2.45 \times 2.55 = 6.25M^2$
D棟	$2.5 \times 2.45 = 6.13M^2$
小計	$= 19.13M^2$

排煙室面積計算	
C棟	$4.5 \times 2.39 + 1.45 \times 0.4 = 11.34M^2$
D棟	$2.45 \times 4.085 + 1.425 \times 1.15 = 11.65M^2$
小計	$= 22.99M^2$

設備面積計算	
A,B棟	$0.55 \times 1.65 \times 2 = 1.82M^2$
D棟	$1.535 \times 2.45 = 3.76M^2$
小計	$= 5.58M^2$

二、面積計算檢討

樓地板面積檢討	
$1146.96 + 79.60 + 132.9 + 19.51 + 19.13 + 22.99 + 5.58 = 1426.67M^2$	
陽台免計容積面積檢討	
$140.35M^2 < 1426.67 \times 10\% = 142.67 \dots OK$	
樓梯免計容積面積檢討	
$79.60 - 1.71 = 77.89M^2 < 1426.67 \times 10\% = 142.67 \dots OK$	
陽台+樓梯免計容積面積檢討	
$140.35 + 77.89 = 218.24M^2 > 1426.67 \times 15\% = 214.00M^2$	
$218.24 - 214.00 = 4.24M^2$ (計入容積總額)	
設備面積檢討	
$132.9 + 19.13 + 22.99 + 5.58 = 180.6M^2$	
當層容積樓地板面積檢討	
$1426.67 - 77.89 - 180.6 + 4.24 = 1172.42M^2$	
(總額) (容積) (容積+陽台樓梯5%容積)	

三、當層戶數檢討 14戶

四、緊急升降機設置檢討	
本棟A,B,C棟21層,高74.45M;D棟21層,高76.65M;E棟21層,高76.65M;F棟21層,高76.65M。	
依據三層緊急升降機, 避難能力十七人, 避難時間05分	
A,B棟 (11~21層) - 設置緊急升降機	
$(86.31 + 79.95 + 68.11 + 66.77 + 79.85 + 94.57) \times 11 = 5231.16 > 500M^2$	
C棟 (11~21層) - 設置緊急升降機	
$(92.16 + 88.77) \times 11 = 1990.23 > 500M^2$	
D棟 (11~19層) - 設置緊急升降機	
$(96.98 + 101.87) \times 3 + (96.98 + 91.70) \times 6 = 1728.63 > 500M^2$	
E棟 (11~13層) - 免設置	
$(79.21 + 79.95) \times 3 = 477.48 < 500M^2$	
F棟 (11~13層) - 免設置	
$(67.42 + 67.13) \times 3 = 403.65 < 500M^2$	

五、排煙室面積檢討

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

六、特別安全梯面積檢討

A,B棟	$(17.36 + 17.25 + 10.08) = 44.69M^2$
$> (77.83 + 71.87 + 59.98 + 58.64 + 71.44 + 85.35) \times 3\% = 12.75M^2$	
C棟	$(31.07 + 11.34) = 42.41M^2 > (82.94 + 78.75) \times 3\% = 4.85M^2$
D棟	$(25.51 + 11.65) = 37.16M^2 > (89.55 + 93.27) \times 3\% = 5.48M^2$

七、居室面積計算

廚房面積	
A1	$1.25 \times 0.45 + 1.575 \times 2.17 + 1.65 \times 2.725 = 8.48M^2$
A2	$1.675 \times 2.175 + 1.675 \times 2.325 = 7.54M^2$
A3	$1.775 \times 2.1 + 2.75 \times 1.6 = 8.13M^2$
B1	$1.775 \times 2.1 + 2.75 \times 1.6 = 8.13M^2$
B2	$1.5 \times 2.65 + 1.675 \times 2.65 = 8.41M^2$
B3	$1.625 \times 2.4 + 1.6 \times 3.325 = 9.22M^2$
C1	$1.625 \times 2.4 + 1.6 \times 3.325 = 9.22M^2$
C2	$3.355 \times 1.6 + 2.695 \times 1.725 = 10.02M^2$
D1	$2.3 \times 1.675 + 1.625 \times 2.2 = 7.43M^2$
D2	$2.235 \times 3.85 = 8.60M^2$
E1	$2.235 \times 3.85 = 8.60M^2$
E2	$1.675 \times 0.35 + 1.81 \times 4.1 + 0.415 \times 2.36 = 8.99M^2$
F1	$1.885 \times 2.025 + 1.825 \times 2.2 = 7.83M^2$
F2	$1.675 \times 2.675 + 3.825 \times 1.325 = 9.55M^2$
居室面積	
A1	$86.31 - 8.48 = 77.83M^2$
A2	$77.6 - 7.54 = 70.06M^2$
A3	$68.86 - 8.13 = 60.73M^2$
B1	$66.77 - 8.13 = 58.64M^2$
B2	$79.85 - 8.41 = 71.44M^2$
B3	$94.57 - 9.22 = 85.35M^2$
C1	$92.16 - 9.22 = 82.94M^2$
C2	$88.77 - 10.02 = 78.75M^2$
D1	$96.98 - 7.43 = 89.55M^2$
D2	$101.87 - 8.60 = 93.27M^2$
E1	$79.21 - 8.60 = 70.61M^2$
E2	$79.95 - 8.99 = 70.96M^2$
F1	$67.42 - 7.83 = 59.59M^2$
F2	$67.13 - 9.55 = 57.58M^2$

圖11-26 九層面積計算圖(S=1/300)



九 採光面積檢討

	平台
	安全梯
	梯廳
	排煙室
	緊急升降機
	一般升降機
	管道

室內面積

閉合面積

樣面面積:

機體不足

樓坪面積:

升降機面移

緊急升降機

排煙室面積

設備間面積

二、面積計算檢討

樓板版面繪制

三 當層戶數檢討 14戸

表 A. B. C 塔 21 层 高 74.45

五 排煙室面積檢討

六 特別安全梯面積検討

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

廁所面積

居室面积

圖11-28 十一層面積計算圖($S=1/300$)