

EXERCISE 12F052 SOLUTIONS

PROBLEM 1

Group B, Type IIA, sprinklered

Table 503: 37,500
Sprinkler increase: 37,500 X 3 = 112,500
Building area: 112,500 X 3 = 337,500

Group A-3, Type IIA, sprinklered

Table 503: 15,500
Sprinkler increase: 15,500 X 3 = 46,500
Building area: 46,500 X 3 = 139,500

Total Building Area: 337,500 + 139,500 = 477,000

PROBLEM 2

Group B, Type IIA, sprinklered

Building area: 337,500
75% Building area: 337,500 X 0.75 = 253,125

Group A-3, Type IIA, sprinklered

Building area: 139,500
25% Building area: 139,500 X 0.25 = 34,875

Total Building Area: 253,125 + 34,875 = 288,000

PROBLEM 3

Group B, Type IIA, sprinklered

Building area: 337,500

Group A-3, Type IIA, sprinklered

Building area: 139,500

Total Building Area: 139,500

PROBLEM 4

Group B, Type IIA, sprinklered

Building area: 337,500

Total Building Area: 337,500

PROBLEM 1

Group B, Type IIB, sprinklered

Table 503: 23,000
Sprinkler increase: 23,000 X 3 = 69,000
Building area: 69,000 X 3 = 207,000

Group A-3, Type IIB, sprinklered

Table 503: 9,500
Sprinkler increase: 9,500 X 3 = 28,500
Building area: 28,500 X 3 = 85,500

Total Building Area: 207,000 + 85,500 = 292,500

PROBLEM 2

Group B, Type IIB, sprinklered

Building area: 207,000
75% Building area: 207,000 X 0.75 = 155,250

Group A-3, Type IIB, sprinklered

Building area: 85,500
25% Building area: 85,500 X 0.25 = 21,375

Total Building Area: 155,250 + 21,375 = 176,625

PROBLEM 3

Group B, Type IIB, sprinklered

Building area: 207,000

Group A-3, Type IIB, sprinklered

Building area: 85,500

Total Building Area: 85,500

PROBLEM 4

Group B, Type IIB, sprinklered

Building area: 207,000

Total Building Area: 207,000