BUILDING DATA

Calif. Polytechnic State University Building 070, Facilities.

Original Construction 1960.

Occupancy Type: B and F1, non-sprinklered, separated occupancy (sprinklers at front portion of Carpentry Shop, F-1 occ.

Construction Type: V-B [(E) Condition per current code]
  Any materials permitted by Code.
  Fire separation distance is greater than 30’, NO LIMIT on exterior openings per table 705.8

Separations: 2-hr Fire Wall between occupancies: NOTE- This Fire Wall Must be repaired as part of any new work on this building (after 2015)

No. of Stories: 2 – OK per Table 503, 2 stories Allowed

(E) Building Height-25’, 55’ allowed

Actual Building Area-
B Area -
1st Floor- 12,800 sq. ft
2nd Floor- 8,848 sq. ft.
Total Area- 21,648 sq. ft.

F-1 Area- 9,600 sq. ft.

Allowable Areas-
Allowable Area Calculation
B- 9000 sf (base allow)

\[ A_a = [A_t + [A_t \times L_f] + [A_t \times L_s]] \ (Per \ 506.1) \]
\[ L_f = \left[\frac{F}{P} - 0.25\right] \times \frac{W}{30} \ (Per \ 506.2) \]

P = 480 ft. (Total Perimeter)

F = 400

W = 30: greater than 30’ separation.

\[ I_f = \left[\frac{F}{P} - 0.25\right] \times \frac{W}{30} \]
\[ I_f = \left[\frac{400}{480} - 0.25\right] \times 1 \]
\[ I_f = .58 \]
Is = 0 (non sprkld)

At = 9,000 sq. ft. (Per Table 503)

Aa = \{9,000 + [9,000 \times 0.58] + [9,000 \times 0]\}

Aa = 9,000 + 5,280 = 14,280 sq. ft. per Floor

First Floor- 12,800 sq. ft. < 14,280 sq. ft. Allowable, OK
Second Floor- 8,848 sq. ft. < 14,280 sq. ft. Allowable, OK

Total Allowable Area- 28,440 sq. ft. (506.4.1, 2 stories)
Total (E) Area – 21,648 sq. ft. OK

Allowable Area Calculation
F1- 8,500 sf (base allow.)

Aa = \{At + [At \times If] + [At \times Is]\} (Per 506.1)
Lf = \left[\frac{F}{P-0.25}\right]\frac{W}{30} \quad (Per 506.2)

P = 400 ft. (Total Perimeter)
F = 320
W = 30: greater than 30’ separation.

If = \left[\frac{F}{P} – 0.25\right]\frac{W}{30}
If = \left[\frac{320}{400} – 0.25\right]\times 1
If = .55

Is = 0 (non sprkld)

At = 8,500 sq. ft. (Per Table 503)

Aa = \{8,500 + [8,500 \times 0.55] + [8,500 \times 0]\}

Aa = 8,500 + 4,675 = 13,175 sq. ft. per Floor

Total Allowable Area- 13,175 sq. ft. (506.4.1, 1 story)
Total (E) Area – 9,600 sq. ft. OK
NOTE: This Building was mislabeled as Type III-B Construction in a remodel in 2014-15.

DSA Info-
DSA Number 110610.
Parking space, path of travel, offices at Room 110, restrooms (Project not implemented)
DSA Number 01-114200
Parking Space, path of travel, ramp, second floor offices and restrooms.

Fire Sprinkler Info-
Carpenter Shop Only, Service Room 11E, Viking Sprinkler System

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