

BUILDING DATA

Calif. Polytechnic State University Building 009- Farm Shop

Original Construction 1946

Construction Type: V-B, Sprinklered [(E) Condition per current code]
Any Materials allowed by code (Metal frame and metal siding)
Non Bearing Exterior Walls (Table 602)-
> 30' : No Requirement.

Openings:
> 30' - No Limit – Openings Comply

Occupancy Type: A-3 Occ. (Per classification by SFM)

Occupancy Separations: None

No. of Stories: 1– OK per Table 503, 1 stories Allowed

(E) Building Height- 23' – OK, 40' allowed.

Actual Building Area-

First Floor: 24,238 sq. ft.

Allowable Area Calculation

$A_a = [A_t + [A_t \times I_f] + [A_t \times I_s]]$ (Per 506.1)

$I_f = [F/P - 0.25] \times W/30$ (Per 506.2)

$P = 712$ ft. (Total Perimeter)

$F = 712$ ft.

Weighted Average W (per Sec. 506.2.1)

$W = (L_1 \times w_1 + L_2 \times w_2 + L_3 \times w_3 \dots) / F$

W is greater than 30' all sides; $W = 30$

$W = (30 \times 712) / 712$

$W = 30$

$I_f = [F/P - 0.25] \times W/30$

$$I_f = [712/712 - 0.25] * 30/30$$

$$I_f = .75$$

$$I_s = 3 \text{ (sprinklered, 1 story)}$$

$$A_t = 6,000 \text{ sq. ft. (Per Table 503)}$$

$$A_a = \{6,000 + [6,000 \times .75] + [6,000 \times 3]\}$$

$$A_a = 6,000 + 4,500 + 18,000 = 28,500 \text{ sq. ft. per Floor}$$

$$\text{First Floor- } 24,238 \text{ sq. ft. } < 28,500 \text{ sq. ft. Allowable, OK}$$

DSA Info-

No DSA number.

Fire Sprinkler Info-

Sprinklers

SFM FILE #- 18-40-03-0001-032