

BUILDING DATA

Calif. Polytechnic State University Building 13, Engineering

Original Construction 1983

Occupancy Type: B Occ., with A-3 Accessory (less than 10%), sprinklered

Construction Type: II-B [(E) Condition per current code]

Primary Structural Frame, non combustible – (E) steel frame and metal wall framing comply.

Exterior bearing walls, non combustible – (E) steel frame and metal wall framing comply.

Interior bearing walls, non combustible – (E) steel frame and metal wall framing comply.

Interior Walls and Partitions (non bearing), Non combustible: (E) metal stud comply

Floor Construction and secondary members, non-combustible: concrete floor slab over metal deck, steel frame

Roof Construction and secondary members, non-combustible: concrete roof slab over metal deck, steel frame

Non Bearing Exterior Walls (Table 602)-

> 30' : No Requirement.

Fire separation distance is greater than 30', NO LIMIT on exterior openings per table 705.8

Building Separations: 2 hour Fire Wall at Grid G separates the 1 story portion from the 2 story portion, OK per table 706.4, note a.

No. of Stories: 2 – OK per Table 503, 3 stories Allowed

(E) Building Height- 38', 55' allowed

Actual Building Area-

One story portion-

First Floor- 12,932 sq. ft.

Allowable Area- 23,000 sq. ft. **OK**

Two Story Portion-

First Floor - 25,500 sq. ft

Second Floor - 22,550 sq. ft.

Total: 48,050 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)

(If not calculated, I_s provides enough increase)

$I_s = 2$ (sprkld)

$A_t = 23,000$ sq. ft. (Per Table 503)

$A_a = \{23,000 + [0] + [23,000 \times 2]\}$

$A_a = 23,000 + 46,000 = 69,000$ sq. ft. per Floor

First Floor- 25,500 sq. ft. < 69,000 sq. ft. Allowable, **OK**

Second Floor- 22,550 sq. ft. < 69,000 sq. ft. Allowable, **OK**

Total Allowable Area- 138,000 sq. ft. (506.4.1, 2 stories)

Total (E) Area – 48,050 sq. ft. **OK**

DSA Info-

No DSA number.

Fire Sprinkler Info-

Fully Sprinklered, S & M Sprinklers, 1984

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