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)
\[ I_f = \frac{[F/P-0.25] \times W}{30} \]  (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