BUILDING DATA

Calif. Polytechnic State University Building 21, Engineering West

Original Construction 1961

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

Construction Type: II-A [(E) Condition per current code]
        Primary Structural Frame , 1 hour – (E) Concrete walls, floors and roof slab and steel frame w/
        fire proofing.
        Exterior bearing walls, 1 hour: (E) Concrete Complies
        Interior bearing walls, 1 hour: (E) Concrete Complies
        Interior Walls and Partitions (non bearing), Non combustible: (E) conc and metal stud comply
        Floor Construction and secondary members, 1 hour: concrete floor slab
        Roof Construction and secondary members, 1 hour: concrete roof slab
        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

Occupancy Separations: None

No. of Stories: 3 – OK per Table 503, 5 stories Allowed

(E) Building Height- 44', 65' allowed

Actual Building Area-

First Floor -   29,978 sq. ft
Second Floor -   58,861 sq. ft.
Third Floor -   44,960 sq. ft.

Total: 133,799 sq. ft.

Allowable Area Calculation

Aa = [At+[At x lf] + [At x ls]} (Per 506.1)
Lf = [F/P-0.25]*W/30 (Per 506.2)

P = 1382 ft. (Total Perimeter)

F = 1382

W = 30: greater than 30' separation.

If = [F/P – 0.25]*W/30

If = [1382/1382 – 0.25]* 1

If = .75

Is = 0 (non sprkld)

At = 37,500 sq. ft. (Per Table 503)

Aa = {37,500 + [23,000 x .75] + [37,500 x 0]}

Aa =37,50000 + 28,125 = 65,125 sq. ft. per Floor

First Floor-   29,978 sq. ft. < 65,125 sq. ft. Allowable, **OK**
Second Floor-   58,861 sq. ft.   < 65,125 sq. ft. Allowable, **OK**
Third Floor-   44,950 sq. ft.   < 65,125 sq. ft. Allowable, **OK**

Total Allowable Area- 196,875 sq. ft. (506.4.1, 3 stories)
Total (E) Area – 133,799 sq, ft. **OK**

DSA Info-

DSA number 110750.
 Path of Travel around Second Floor, Elevator to Third Floor, and Restrooms on second floor Rooms 115 and 112.

Fire Sprinkler Info-
No Sprinklers.

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