

BUILDING DATA

Calif. Polytechnic State University Building 033, Fisher Science

Original Construction 1977

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

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

Primary Structural Frame Non Combustible- Concrete walls, frame, floors, roof.

Roof Framing Non Combustible- Concrete

Non Combustible Exterior Bearing Walls: (E) Concrete Complies

Interior Walls and Partitions, non combustible- metal stud walls comply.

Fire separation distance is greater than 30' at North, East and South, NO LIMIT on exterior openings per table 705.8

Portion of West wall- 27' to Building 53; 70% openings allowed, UP, NS

Wall area-798 sf per floor; 70% = 558 sf allowed. 42 sf of openings 1st Flr.- **OK**

Wall area-798 sf per floor; 70% = 558 sf allowed. 128 sf of openings 2nd Flr.- **OK**

Wall area-798 sf per floor; 70% = 558 sf allowed. 48 sf of openings 3rd Flr.- **OK**

Portion of West wall- 27' to Building 47; 70% openings allowed, UP, NS

Wall area- 574 sf per floor; 70% = 402 sf allowed. 52 sf of openings- **OK**

Portion of West wall- 22' to Building 47; 45% openings allowed, UP, NS

Wall area- 140 sf per floor; 45% = 63 sf allowed. 15 sf of openings- **OK**

Occupancy Separations- none

NOTE: A 2 hr. fire separation wall is required between Science North and Fisher Science at the First Floor/Basement Level. The existing concrete walls comply, but the door should be replaced with a 1-1/2 hr. pair of doors and frame.

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

(E) Building Height- 42', 55' allowed

Actual Building Area-

(Basement: 6,780 sq. ft.) not included in overall

First Floor: 25,247 sq. ft.

Second Floor- 24,969 sq. ft.

Third Floor- 19,704 sq. ft.

Total: 76,700 sq. ft. (Includes covered areas)

Allowable Area Calculation

$Aa = [At + [At \times lf] + [At \times ls]]$ (Per 506.1)

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

$P = 1330$ ft. (Total Perimeter)

F = 1150 (greater than 30')

W = 30: greater than 30' separation.

If = $[F/P - 0.25] * W/30$

If = $[1150/1330 - 0.25] * 1$

If = .61

Is = 0 (non sprkld)

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

Aa = $\{23,000 + [23,000 \times .61] + [23,000 \times 0]\}$

Aa = 23,000 + 14,137 = 37,137 sq. ft. per Floor

Total (E) Area, First floor – 25,247 sq. ft. **OK**

Total (E) Area, Second floor – 24,969 sq. ft. **OK**

Total (E) Area, Third floor – 19,704 sq. ft. **OK**

Total allowable area, building (x3, per 506.4.1.2)- 111,411sq. ft.- **OK**

DSA Info-

No DSA number.

Fire Sprinkler Info-

Basement only. Service Room 158. Star SSP- 1 pendant only.

SFM FILE #- 18-40-03-0001-073