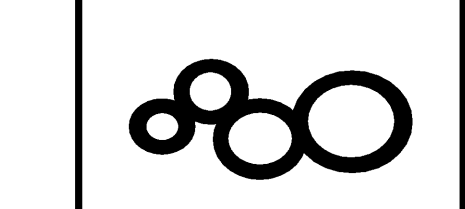


ISSUED FOR DATE table with columns for issue date and description.



BUILDING CODE ANALYSIS con't

TYPES OF CONSTRUCTION (CHAPTER 6)

Table with columns: BUILDING ELEMENT, PROTECTION IN HOURS. Rows include Structural Frame, Bearing Walls, Non Bearing Exterior Walls, Non Bearing Interior Walls, Floor Construction, Roof Construction.

* THE STRUCTURAL FRAME SHALL BE CONSIDERED TO BE THE COLUMNS AND THE GIRDERS, BEAMS, TRUSSES, AND SPANDRELS HAVING DIRECT CONNECTION TO THE COLUMNS AND BRACING MEMBERS...

ALL STRUCTURAL FRAME MEMBERS REQUIRED TO BE PROTECTED AS SHOWN IN TABLE 601. WILL BE FIREPROOFED.

CBC SECTION 1509.2 THE AGGREGATE AREA OF THE PENTHOUSES AND OTHER ROOFTOP STRUCTURES SHALL NOT EXCEED ONE-THIRD THE AREA OF THE SUPPORTING ROOF.

CBC SECTION 1509.2.1 PENTHOUSES SHALL BE CONSTRUCTED WITH WALLS, FLOORS, AND ROOF AS REQUIRED FOR THE BUILDING.

FIRE RESISTANCE RATED CONSTRUCTION (CHAPTER 7)

ALL PIPING CONDUIT AND CABLE PENETRATIONS OF FIRE WALLS, PARTITIONS, AND HORIZONTAL ASSEMBLIES SHALL BE PROTECTED AS PER CBC SECTION 712.

NO ELEVATOR LOBBY REQUIREMENT PER CBC SECTION 707.1.4 EXCEPTION #4. IN OTHER THAN HIGH RISE BUILDINGS...

CBC SECTION 707.4.1 OPENING PROTECTIVES- OPENINGS IN HOISTWAY ENCLOSURES SHALL BE PROTECTED AS REQUIRED IN CHAPTER 7.

CBC SECTION 707.4.2 SHAFT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 2 HOURS...

MEANS OF EGRESS (CHAPTER 10)

Table with columns: USE, LOAD FACTOR (PERSON/ SF). Rows include Business-Office/Labs, Assembly-Conference Room, Storage/Mechanical, Kitchen, Assembly-Cafe, Assembly-Auditorium, Assembly-Pre Function.

MEANS OF EGRESS WIDTH

Table with columns: MINIMUM DOOR CLEAR EXT WIDTH, MINIMUM STAIR WIDTH, CORRIDORS SERVING 10 OR MORE, CORRIDORS OVER 200'

Table with columns: BASE ALLOWABLE (NON SPRINKLERED), INCREASE FOR SPRINKLERS (+ 100'), 200'-0"

THE EGRESS FROM THE OFFICE PODS IS CONSIDERED A CORRIDOR. CBC TABLE 1017.1 DOES NOT REQUIRE THE CORRIDORS TO BE RATED...

MINIMUM REQUIRED PLUMBING FIXTURES (CPC TABLE 4-1)

Table with columns: LEVEL, SQ. FT., OCCUPANCY CLASSIFICATION, OCCUPANTS. Rows include Vivarium, Level 1, Level 2, Level 3, Level 4.

PLUMBING OCCUPANCY TOTALS PER CPC TABLE 4.1

Table with columns: OCCUPANCY, TOTAL, MEN, WOMEN. Rows include Assembly, Business, Storage.

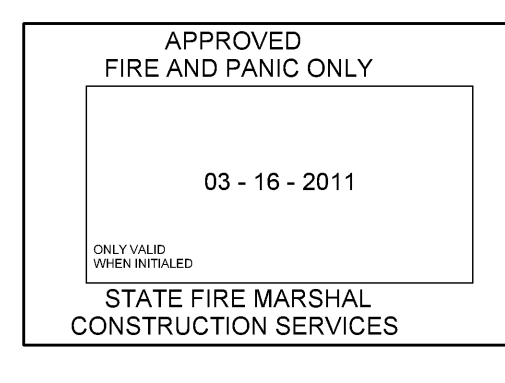
MINIMUM PLUMBING FIXTURES REQUIRED BY OCCUPANCY:

Table with columns: OCCUPANCY, TOTALS, WC, UR, LV. Rows include Assembly, Business.

Table with columns: TOTAL MENS FIXTURES, WC, UR, LAV. Rows include Required, Provided.

Table with columns: TOTAL WOMENS FIXTURES, WC, LAV. Rows include Required, Provided.

Table with columns: STORAGE OCCUPANCY, UNISEX TOILET IN LOADING DOCK/ STORAGE AREA- LEVEL 1



BUILDING CODE ANALYSIS

SCOPE OF WORK

NEW CONSTRUCTION FOR A CONSORTIUM OF STAKEHOLDERS ON LEASED UNIVERSITY OF CALIFORNIA, SAN DIEGO LAND FOR RESEARCH AND 8 OCCUPANCY LABORATORY WORK.

APPLICABLE CODES

- 2007 BUILDING STANDARDS ADMINISTRATIVE CODE PART 1, TITLE 24 C.C.R.
2007 CALIFORNIA BUILDING CODE (CBC) PART 2, TITLE 24 C.C.R.
2007 CALIFORNIA ELECTRICAL CODE (CEC) PART 3, TITLE 24 C.C.R.

PARTIAL LIST OF APPLICABLE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS

- NFPA 13, 2002 EDITION- AUTOMATIC SPRINKLER SYSTEMS
NFPA 14, 2003 EDITION- STAIRWELL SYSTEMS
NFPA 11, 2002 EDITION- DRY CHEMICAL EXTINGUISHING SYSTEMS

REFERENCE CODE SECTION FOR NFPA STANDARDS: 2007 CBC (SFM) CHAPTER 35

FIRE EXTINGUISHER LOCATIONS TO BE AS PER CFC CHAPTER 906 AND TABLE 906.3.1

BUILDING AREA SUMMARY (SQUARE FEET)

Table with columns: VIVARIUM GROSS AREA, INTERSTITIAL GROSS AREA, LEVEL ONE GROSS AREA, LEVEL TWO GROSS AREA, LEVEL THREE GROSS AREA, LEVEL FOUR GROSS AREA.

TOTAL BUILDING AREA 149,400 SF * INTERSTITIAL IS NOT COUNTED TOWARDS TOTAL BUILDING AREA

USE OR OCCUPANCY CLASSIFICATION (CHAPTER 3)

Table with columns: LEVEL, DESCRIPTION, OCCUPANCIES. Rows include B2 Labs, 1 Labs, 2 Labs/Offices, 3 & 4 Labs/Offices.

SUM OF RATIO CALCULATIONS FOR EACH OCCUPANCY:

A = [(11,500 + (11,500 X .745) + (11,500 X 2) + 43,067 SF X 2 (MULTI-STORY)) = 86,134 SF

B = [(18,000 + (18,000 X .745) + (18,000 X 2) + 61,410 SF X 3 (MULTI-STORY)) = 202,230 SF

LEVEL 1 NON - SEPARATED USE CALCULATION:

A - 3 = [(11,500 + (11,500 X .745) + (11,500 X 2) = 43,067

SINCE THE FLOOR AREA OF LEVEL 1 IS LESS THAN THIS ALLOWABLE AREA THIS FLOOR IS ALLOWED TO BE CONSIDERED NON - SEPARATED. PLEASE NOTE THAT THE FIRE ALARM AND SPRINKLER REQUIREMENTS FOR THIS FLOOR IS BASED ON THE A - 3 OCCUPANCY.

LEVEL 2 SEPARATED USE CALCULATION:

4,835 (A actual) x 26,165 (B actual) = 0.195 < 1

BASED ON THE CALCULATION ABOVE, THIS QUALIFIES AS SEPARATED. PLEASE NOTE THAT THE FLOOR WILL BE SEPARATED ABOVE AND BELOW WITH A ONE HOUR FLOOR CEILING ASSEMBLY.

GENERAL BUILDING HEIGHTS AND AREAS (CHAPTER 5)

Table with columns: CONSTRUCTION TYPE, ALLOWABLE AREA, ALLOWED STORY /HT, PROPOSED STORY /HT.

* PER CBC 504.2, WHERE A BUILDING IS EQUIPPED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1, THE VALUE SPECIFIED IN TABLE 503 FOR MAXIMUM HEIGHT IS INCREASED BY 20 FEET AND THE MAXIMUM NUMBER OF STORIES IS INCREASED BY ONE.

Table with columns: OCCUPANCY, ALLOWABLE FLR AREA, FRONTAGE INCREASE, SPRINKLER INCREASE, MULTI-STORY PER FLOOR AREA, ADJUSTABLE ALLOWABLE FLOOR AREA.

* PER CBC 506.2, THE FRONTAGE INCREASE HAS BEEN CALCULATED AS FOLLOWS:

I_a = [F / (P - 0.28) W] / 30

I_a = [1053 / (1098 - 28) / 30] / 30

I_a = 0.745

DEFERRED SUBMITTALS

- DEFERRED SUBMITTAL(S) SHALL BE PROVIDED FOR THE FOLLOWING BUILDING COMPONENTS/ELEMENTS:
- PERMANENT SHORING WALL
- NON-ARCHITECTURAL METAL STAIRS

1. THE ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND APPROVAL OF THE SCAL OF THE RESPONSIBLE ENGINEER. SHALL BEAR THE SHOP DRAWING APPROVAL STAMPS OF THE PROJECT ARCHITECT, ENGINEER OF RECORD, AND GENERAL CONTRACTOR ON ALL SHEETS OF PLANS AND COVER OF THE CALCULATIONS.

2. DEFERRED SUBMITTAL ITEMS SHALL NOT BE FABRICATED/INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

3. PROVIDE TWO COPIES OF DEFERRED SUBMITTAL DOCUMENTS FOR FINAL APPROVAL.

HAZARDOUS MATERIALS TECHNICAL REPORT

THE RECOMMENDATION PROVIDED IN THE TECHNICAL REPORT SHALL BE FOLLOWED. SANFORD CONSORTIUM FOR REGENERATIVE MEDICINE TECHNICAL REPORT HAZARDOUS MATERIALS SUMMARY, FEBRUARY 2, 2009 PREPARED BY: OCCUPATIONAL SERVICES, INC.

CONTROL AREAS

LAB BUILDING

- CONTROL AREA 1 (1237 SF) INCLUDES VIVARIUM, LEVEL 1, LEVEL 2 AND LEVEL 3.
CONTROL AREA 2 (8376 SF) CONTROL AREA 3 (1256 SF)
LEVEL 4 IS DIVIDED BY A 2HR FIRE RESISTIVE BARRIER INTO TWO CONTROL AREAS.

- SAFETY STORAGE HAZMAT UNIT
SAFETY STORAGE CA-1 (56' 3" SF)
SAFETY STORAGE CA-2 (56' 3" SF)
THE SAFETY STORAGE WILL BE INTERNALLY DIVIDED BY A 1HR FIRE RESISTIVE BARRIER INTO TWO CONTROL AREAS.

- 1. SCRM WILL BE EQUIPPED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM FOR A 100% INCREASE IN THE MAXIMUM ALLOWABLE QUANTITIES.
2. SCRM WILL USE APPROVED STORAGE CABINETS, EXHAUSTED ENCLOSURES AND SAFETY CANS FOR 100% INCREASE IN THE MAXIMUM ALLOWABLE QUANTITIES.