

**CODE, RULES & REGULATIONS**

ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST REGULATIONS OF THE STATE FIRE MARSHAL, CALIFORNIA CODE REGULATIONS, AND ALL OTHER APPLICABLE STATE ORDINANCES. NOTHING IN THESE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THE LATEST REGULATIONS. THIS REQUIREMENT SHALL GOVERN.

**FIRE ALARM SYSTEM SEQUENCE OF OPERATIONS**

RESULT OF OPERATION	INITIATION	
	MANUAL PULL STATION	LOSS OF SMART CIRCUITRY POWER
ANNUNCIATE ALARM	YES	YES
ANNUNCIATE TROUBLE	YES	YES
ACTIVATE ALL AUDIBLE ALARMS	YES	YES
ACTIVATE ALL VISUAL ALARMS	YES	YES
TRANSFER TO BATTERY BACK-UP	YES	YES

**FIRE ALARM SYSTEM REQUIREMENTS**

THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE, SECTION 906.9, CALIFORNIA ELECTRICAL CODE, ARTICLE 180 AND CALIFORNIA FIRE CODE, ARTICLE 10.

INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL MAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL'S APPROVAL, HAVE BEEN RECEIVED. THE FIRE ALARM SYSTEM SHALL BE INSTALLED AND TESTED BY THE DIVISION OF THE STATE ARCHITECT - OFFICE OF REGULATION SERVICES.

UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALING EQUIPMENT, A SATISFACTION TEST SHALL BE PERFORMED BY THE DIVISION OF THE STATE ARCHITECT - OFFICE OF REGULATION SERVICES. THE PRESENCE OF THE EMPLOYING FIRE AGENCY PER NFA 72, IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 15db OVER AMBIENT NOISE LEVELS, THE FIRE ALARM SYSTEM SHALL BE REWORKED BY THE EMPLOYING AGENCY PER CALIFORNIA FIRE CODE.

A CERTIFICATE OF COMPLETION SHALL BE PROVIDED TO THE OWNER PER NFA 72, CHAPTER 1 AND THE CALIFORNIA FIRE CODE.

**FIRE ALARM LEVEL OF AUDIBILITY**

ALARM INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL BE SO LOCATED AND UNOBSTRUCTED AS TO CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15 DB ABOVE AMBIENT NOISE LEVELS MEASURED FOUR FEET ABOVE THE FLOOR INSIDE BUILDING.

AMBIENT NOISE LEVELS SHALL BE CONSTRUED TO MEAN THAT WHICH CAN NORMALLY BE EXPECTED TO EXIST WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATIVE OR WORKING CONDITIONS.

**SEISMIC ANCHORAGE REQUIREMENTS**

ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA:

EQUIPMENT ON GRADE	20 % OF OPERATING WEIGHT
EQUIPMENT ON STRUCTURE	30 % OF OPERATING WEIGHT

FOR FLEXIBLY MOUNTED EQUIPMENT, USE 4 X THE ABOVE VALUES, AND FOR SINGLE/DOUBLE VERTICAL FORCE USE 1/3 X THE HORIZONTAL FORCE. THE ABOVE VALUES ARE FOR AN IMPORTANCE FACTOR OF I = 1.0 AND SEISMIC ZONE, Z = 0.4.

FOR MULTI-PURPOSE BUILDINGS, PERCENTAGE OF OPERATING WEIGHT SHALL BE 12% OF VALUES NOTED ABOVE.

WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ELECTRICAL ENGINEER AND THE FIELD ENGINEER OF THE DIVISION OF THE STATE ARCHITECT.

**DIVISION OF THE STATE ARCHITECT APPLICABLE CODES AND STANDARDS**

1995 CALIFORNIA BUILDING CODE, PART 1 AND PART 2, TITLE 24 (1994 UNIFORM BUILDING CODE AND CALIFORNIA AMENDMENTS)

1995 CALIFORNIA ELECTRICAL CODE, PART 9, TITLE 24 (1993 NATIONAL ELECTRICAL CODE AND CALIFORNIA AMENDMENTS)

1995 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 (1994 UNIFORM MECHANICAL CODE AND CALIFORNIA AMENDMENTS)

1995 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 (1994 UNIFORM PLUMBING CODE AND CALIFORNIA AMENDMENTS)

1995 CALIFORNIA FIRE CODE, PART 9, TITLE 24 (1994 UNIFORM FIRE CODE AND CALIFORNIA AMENDMENTS)

CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 (1994 UNIFORM BUILDING CODE STANDARDS AND CALIFORNIA AMENDMENTS)

PUBLIC SAFETY, TITLE 19, CALIFORNIA CODE OF REGULATIONS, STATE FIRE MARSHAL REGULATIONS

STANDARDS AND GUIDES:

NFA 72, NATIONAL FIRE ALARM CODE 1983 EDITION.

POLICY #45-09, FIRE AND LIFE SAFETY, DIVISION OF THE STATE ARCHITECT - OFFICE OF REGULATION SERVICES.

**NOTE 'A'**

FIRE ALARM AND INTERCOM WIRING, DEVICES AND MATERIALS SHALL BE PROVIDED AND INSTALLED BY OWNER. THE RACEWAY SYSTEM IS BY THE CONTRACTOR.

**NOTE 'EB'**

AT EACH RELOCATABLE, INSTALL A 12" X 12" X 6" PULL BOX OVER THE SMALLER EXTERIOR BOX PROVIDED WITH THE RELOCATABLE FOR ACCESS TO THE SIGNALING BOX. PROVIDE INTERLIGHT SEAL AROUND THE 12" X 12" X 6" BOX. FROM EACH SIGNAL BOX (SB) RUN THE FOLLOWING TO THE 12" X 12" X 6" BOX AT EACH OF THE TWO NEAREST RELOCATABLES:

- 1 1/2" CABLE TO 1/2" F.A. HORN
- 1 1/2" CABLE TO 1/2" F.A. PULL
- 1 1/2" CABLE TO 1/2" F.A. PULL

CONDUCTORS ARE BY OWNER.

**SIGNAL FEEDERS**

- (A) FLOOR 1 1/2" C CONDUCTORS ARE BY OWNER
- (B) MAIN 1 1/2" C TO F.A. MASTER (CONDUCTORS ARE BY OWNER)
- (C) MAIN 1 1/2" C TO I.C. MASTER, 510B TWO SPARE 1 1/2" C ABOVE I.C. MASTER AND GAP OFF.

**COMPLETE FIRE ALARM PLAN SUBMITTAL**

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF MATERIALS OR METHODS SHALL BE SUBJECT TO THE APPROVAL OF THE STATE ARCHITECT. FEES FOR REVIEW AND APPROVAL WILL BE INCURRED BY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

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