

CODE APPLICATION NOTICE (CAN) INDEX

REVISION: September 14 , 2007

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<u>1-7-204(c)</u>	Minimum Qualifications for Class "C" Hospital Inspector Exam	08/15/05	Approved 08/18/05
<u>1-11.1</u>	NPC 2 – Emergency Lighting in the Means of Egress (SB 1953)	10/20/00	Approved 10/20/00
<u>1-1.5.2</u>	Request for Extension (Diminished Health Care Capacity)	03/01/02	Revision 09/16/04 Approved 09/20/04
<u>1-7-125(d)</u>	Original Reproducible Drawings	01/28/98	Approved 02/17/98
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<u>2-423A.1</u>	Connection to Patient Medical Systems	08/20/96	Revision 09/17/04 Approved 09/21/04
<u>2-1003.2.9</u>	Means of Egress Illumination	03/01/01	Revision 08/18/04 Approved 08/25/04
<u>2-1109B.3</u>	18 Inch Strike Zone for Accessibility	09/27/00	Revision 09/16/04 Approved 09/21/04
<u>2-1648A</u>	Seismic Retrofit of Single Story Hospital Buildings Utilizing, Wood Frame or Light Steel Construction	04/07/00	Revision 08/19/04 Approved 08/25/04 Previously 2-1648B
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<u>2-1925B.3.5</u>	Drilled-In Anchors in Concrete	08/26/02	Approved 09/03/02
<u>2-3405</u>	Change In Use	06/08/05	Approved 06/09/05
<u>2-3505.1</u>	Visual Fire Alarms	06/06/95	Revision 09/15/04 Approved 09/21/04 Previously: 2-1108A.3

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<u>3-220-11</u>	General Lighting. Demand Factors	02/11/98	Revision 08/18/04 Approved 08/25/04
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	Fire Alarm Systems Plans and Specifications		Revision 08/18/04 Approved 08/25/04
<u>9-8705.4</u>	Fire-resistive Assemblies and Construction	03/02/93	Revision 08/18/04 Approved 08/25/04

*Indicates revised

CODE APPLICATION NOTICE

FILE NO. CAN 1

DATE: September 5, 1989

Accessibility for Existing Buildings – Valuation Threshold for Unreasonable Hardship

The valuation threshold amount for unreasonable hardship referred to in the 2001 California Building Code (CBC) Section 1134B.2.1, Exception 1 is updated on an annual basis. As of January 1, 2007, this threshold is \$116,837.68.

Enforceable Codes

The following are the enforceable codes for facilities under the authority of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983:

Application means the submission of a Preliminary or Final Application for Plan Review.

APPLICATION

All applications submitted on or after January 1, 2008

CODE

- 2007 California Building Standards Administrative Code**
Part 1, Title 24, California Code of Regulations (CCR)
- 2007 California Building Code**
Part 2, Title 24, CCR
(2006 IBC and 2007 California Amendments)
- 2007 California Electrical Code**
Part 3, Title 24, CCR
(2005 NEC and 2007 California Amendments)
- 2007 California Mechanical Code**
Part 4, Title 24, CCR
(2006 UMC and 2007 California Amendments)
- 2007 California Plumbing Code**
Part 5, Title 24, CCR
(2006 UPC and 2007 California Amendments)
- 2007 California Fire Code**
Part 9, Title 24, CCR
(2006 IFC and 2007 California Amendments)

All applications submitted between March 17, 2007 and December 31, 2007.

- 2007 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 2001 California Building Code**
Part 2, Title 24, CCR
(1997 UBC and 2001 California Amendments)
- 2004 California Electrical Code**
Part 3, Title 24, CCR
(2002 NEC and 2004 California Amendments)
- 2001 California Mechanical Code**
Part 4, Title 24, CCR
(2000 UMC and 2001 California Amendments)
- 2001 California Plumbing Code**
Part 5, Title 24, CCR
(2000 UPC and 2001 California Amendments)
- 2001 California Fire Code**
Part 9, Title 24, CCR
(2000 UFC and 2001 California Amendments)

State of California

Office of Statewide Health Planning and Development

All applications submitted between August 1, 2005 and March 16, 2007

- 2001 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 2001 California Building Code**
Part 2, Title 24, CCR
(1997 UBC and 2001 California Amendments)
- 2004 California Electrical Code**
Part 3, Title 24, CCR
(2002 NEC and 2004 California Amendments)
- 2001 California Mechanical Code**
Part 4, Title 24, CCR
(2000 UMC and 2001 California Amendments)
- 2001 California Plumbing Code**
Part 5, Title 24, CCR
(2000 UPC and 2001 California Amendments)
- 2001 California Fire Code**
Part 9, Title 24, CCR
(2000 UFC and 2001 California Amendments)

All applications submitted between November 1, 2002 and July 31, 2005

- 2001 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 2001 California Building Code**
Part 2, Title 24, CCR
(1997 UBC and 2001 California Amendments)
- 2001 California Electrical Code**
Part 3, Title 24, CCR
(1999 NEC and 2001 California Amendments)
- 2001 California Mechanical Code**
Part 4, Title 24, CCR
(2000 UMC and 2001 California Amendments)
- 2001 California Plumbing Code**
Part 5, Title 24, CCR
(2000 UPC and 2001 California Amendments)
- 2001 California Fire Code**
Part 9, Title 24, CCR
(2000 UFC and 2001 California Amendments)

All applications submitted between July 1, 1999 and October 31, 2002

- 1998 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 1998 California Building Code**
Part 2, Title 24, CCR
(1997 UBC and 1998 California Amendments)
- 1998 California Electrical Code**
Part 3, Title 24, CCR
(1996 NEC and 1998 California Amendments)
- 1998 California Mechanical Code**
Part 4, Title 24, CCR
(1997 UMC and 1998 California Amendments)
- 1998 California Plumbing Code**
Part 5, Title 24, CCR
(1997 UPC and 1998 California Amendments)
- 1998 California Fire Code**
Part 9, Title 24, CCR
(1997 UFC and 1998 California Amendments)

State of California

Office of Statewide Health Planning and Development

**All applications submitted
between February 19, 1996 and
June 30, 1999**

- 1995 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 1995 California Building Code**
Part 2, Title 24, CCR
(1994 UBC and 1995 California Amendments)
- 1995 95 California Electrical Code**
Part 3, Title 24, CCR
(1993 NEC and 1995 California Amendments)
- 1995 California Mechanical Code**
Part 4, Title 24, CCR
(1994 UMC and 1995 California Amendments)
- 1995 California Plumbing Code**
Part 5, Title 24, CCR
(1994 UPC and 1995 California Amendments)
- 1995 California Fire Code**
Part 9, Title 24, CCR
(1994 UFC and 1995 California Amendments)

**All applications submitted between
December 28, 1995 and February
18, 1996**

- 1995 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 1995 California Building Code**
Part 2, Title 24, CCR
(1994 UBC and 1995 California Amendments)
- 1995 California Electrical Code**
Part 3, Title 24, CCR
(1993 NEC and 1995 California Amendments)
- 1992 California Mechanical Code**
Part 4, Title 24, CCR
(1991 UMC and 1995 California Amendments)
- 1995 California Plumbing Code**
Part 5, Title 24, CCR
(1994 UPC and 1995 California Amendments)
- 1995 California Fire Code**
Part 9, Title 24, CCR
(1994 UFC and 1995 California Amendments)

**All applications submitted between
August 14, 1992 and December 27,
1995**

- 1992 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 1992 California Building Code**
Part 2, Title 24, CCR
(1991 UBC and 1992 California Amendments)
- 1991 California Electrical Code**
Part 3, Title 24, CCR
(1990 NEC and 1990 California Amendments)
- 1992 California Mechanical Code**
Part 4, Title 24, CCR
(1991 UMC and 1992 California Amendments)
- 1992 California Plumbing Code**
Part 5, Title 24, CCR
(1991 UPC and 1992 California Amendments)

State of California

Office of Statewide Health Planning and Development

All applications submitted between June 30, 1991 and August 13, 1992

- 1989 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 1989 California Building Code**
Part 2, Title 24, CCR
(1988 UBC and 1989 California Amendments)
- 1991 California Electrical Code**
Part 3, Title 24, CCR
(1990 NEC and 1990 California Amendments)
- 1989 California Mechanical Code**
Part 4, Title 24, CCR
(1988 UMC and 1989 California Amendments)
- 1989 California Plumbing Code**
Part 5, Title 24, CCR
(1988 UPC and 1989 California Amendments)

All applications submitted between September 1, 1989 and June 29, 1991

- 1989 California Building Standards Administrative Code**
Part 1, Title 24, CCR
- 1989 California Building Code**
Part 2, Title 24, CCR
(1988 UBC and 1989 California Amendments)
- 1989 California Electrical Code**
Part 3, Title 24, CCR
(1987 NEC and 1989 California Amendments)
- 1989 California Mechanical Code**
Part 4, Title 24, CCR
(1988 UMC and 1989 California Amendments)
- 1989 California Plumbing Code**
Part 5, Title 24, CCR
(1988 UPC and 1989 California Amendments)

All hospital, SNF, ICF (excluding type V, single story wood or light steel frame SNF's and ICF's) applications submitted prior to September 1, 1989

- 1985 Triennial edition of Part 1, Title 24, California Administrative Code (CAC)**
- 1979 UBC and 1985 Triennial edition of Part 2, Title 24, CAC**
- 1981 NEC and 1985 Triennial edition of Part 3, Title 24, CAC**
- 1985 UMC and 1987 Triennial edition of Part 4, Title 24, CAC**
- 1985 UPC and 1986 Supplement of Part 5, Title 24, CAC (based upon 1985 edition)**

All type V, single story wood or light steel frame SNF and ICF applications submitted prior to September 1, 1989

- 1985 Triennial edition of Part 1, Title 24, CAC**
- 1982 UBC and 1985 Triennial edition of Part 2, Title 24, CAC**
- 1981 NEC and 1985 Triennial edition of Part 3, Title 24, CAC**
- 1985 UMC and 1987 Triennial edition of Part 4, Title 24, CAC**
- 1985 UPC and 1986 Supplement of Part 5, Title 24, CAC (based upon 1985 edition)**

ORIGINAL SIGNED
John D. Gillengerten

8/20/2007
Date

CODE APPLICATION NOTICE

CODE SECTION: Title 24, Part 1, California Administrative Code, Chapter 6

1.4.5.1 Change in seismic performance category.

...

1.4.5.1.1 – The SPC or NPC for a hospital building may be changed by the Office from the initial determination made per Sections 2.0.1.2.3 or 11.0.1.2.1 upon the following:

1. A seismic evaluation report shall be submitted and approved which shall include either or both of the following:

- 1.1 A structural evaluation report in accordance with Section 1.3.3;

- 1.2 A nonstructural evaluation report in accordance with Section 1.3.4.

Exception: To change an NPC 1 hospital building to an NPC 2 under this section, the nonstructural evaluation may be limited in scope to the systems and equipment specified in Section 11.2.1.

2. The building has been modified to comply with the requirements of Chapter 16B, Part 2 of Title 24 for the specified SPC or NPC.

BACKGROUND:

This CAN is intended to address nonstructural seismic upgrades from NPC 1 to NPC 2 only. The Office has sole authority for determining if the requirements for changing the Nonstructural Performance Category (NPC) of a hospital building have been satisfied. Hospital facilities were required to submit nonstructural evaluation reports to the Office by January 1, 2001. In lieu of an evaluation, Part 1, Title 24, Section 11.01.2.1 allows the submittal of a statement certifying that the building is designated NPC 1 in conformance with Table 11.1.

Before the Office will consider changing the nonstructural performance category from NPC 1 to NPC 2, plans showing the work required for NPC 2 compliance must already have been submitted to and approved by the office. 100% verified reports must be submitted to the Office to demonstrate that the construction work has been completed.

At the present time, in order to change to a higher NPC, additional nonstructural evaluations must be performed, and a report must be submitted to the Office. (See Sections 11.01.3, 1.4.5.1.1, and 1.3.4 of Part 1, Title 24.)

INTERPRETATION:

For nonstructural upgrades from NPC 1 to NPC 2, the Office will accept an engineering report in lieu of the NPC 2 evaluation report required by Section 1.4.5.1.1.

The engineering report shall comply with the following minimum requirements:

1. The report shall be stamped and signed by a California registered structural engineer, certifying compliance with the requirements of NPC 2.
2. The report shall state that the systems and equipment listed in Table 11.1 for NPC 2 compliance either comply with or have been modified to comply with the requirements of Chapter 16B, 1998 California Building Code, Title 24.
3. The report shall state what specific deficiencies have been addressed in the NPC 2 upgrade projects, and provide OSHPD project numbers for these projects.
4. The report shall state that the corrective work required for NPC 2 compliance has been completed under permits issued by OSHPD.
5. If the hospital owner or governing body has already submitted a revised or new NPC 2 evaluation report, and the Office has reviewed and made comments on this report, the engineering report shall include a statement that all comments pertaining to NPC 2 compliance in the OSHPD review have been addressed.

REASON:

Buildings upgraded to NPC 2 will remain in use only for a limited period of time. They are required to be either upgraded to NPC 3 or higher or removed from acute care service by 2008, or no later than 2013 with extensions. (In certain circumstances, facilities in areas of low seismic risk may be permitted to continue operating with a rating of NPC 2 until 2030.)

There are a limited number of systems that must be braced and anchored to comply with NPC 2 requirements. The construction projects anchoring and bracing these systems should have already been reviewed and approved by the Office, and construction was required to be complete before January 1, 2002. Considering the time frame these buildings will be in service, and limited scope of work required for NPC 2 compliance, the possibility of an error resulting in a serious negative impact is slight.

ORIGINAL SIGNED

5/23/05

Kurt A. Schaefer

Date

CODE APPLICATION NOTICE

CODE SECTION: Title 24, Part 1, California Administrative Code

7-204. Minimum Qualification for Examination.

An applicant must meet the following criteria to be eligible to participate in the certification examination for a Class "A", "B", or "C" Hospital Inspector:

...

(c) Minimum Qualifications for Class "C" Hospital Inspector Exam:

1. High school graduation or the equivalent and four years experience involving building projects as an architect's, engineer's, owner's, local building official's or general contractor's representative in technical inspection or inspection supervision [NOTE: Experience in subsection (c)(1) may be substituted with college education with major work in architecture, engineering, building inspection and/or construction on a year-for-year basis for a maximum of two years.]; or
2. Possess a valid California registration/license as an engineer and two years experience involving building projects as an architect's, engineer's, owner's, local building official's or general contractor's representative in technical inspection or inspection supervision; or
3. Possess a valid California registration/license as a structural, mechanical, or electrical engineer, or a valid California license as an architect.

7-207. Examination for Certification.

(a) The Office shall administer an exam not less than once in every calendar year in the Sacramento and Los Angeles areas. The certification exam will consist of a written exam.

(b) The scope of the written certification examination will be to measure the applicant's ability to read and understand construction plans and specifications; ability to identify and understand the application of various California Building Standards Code requirements; ability to display good judgment in work situations; knowledge of appropriate inspector duties and ability to communicate in writing. The test will be divided into sections covering the following code enforcement areas of construction inspection: structural, architectural, mechanical, electrical, fire and life safety, and administrative.

(c) In order to be successful in the certification exam, a candidate must obtain a passing score of at least 75 percent in each section of the written exam.

INTERPRETATION:

Section 7-207 requires the Office to administer an examination for the certification of hospital inspectors. The examination is designed to measure the applicant's technical qualifications as well as knowledge of administrative and procedural requirements. For Class "C" hospital inspectors, the Office will accept the following technical certifications as a demonstration of technical proficiency in the area of certification. The Office will administer an examination that evaluates the candidate's knowledge of administrative and procedural requirements for Class C inspectors.

Certifications accepted for Class C Inspector of Record:

- Fire Alarm – NICET, Level III
- Fire Extinguishing Systems – NICET, Level III
- Fire Resistive Construction – ICC Building Inspector Certification
- Medical Gas Systems – PIPE Certification
- Plumbing – IAPMO Certification
- Mechanical – IAPMO Certification
- Electrical – ICC Certification
- Concrete (Prestressed and Reinforced) – ICC Certification
- Masonry – ICC Certification
- Steel –ICC Structural Steel Certification
- Welding – AWS Certification
- Framing and Drywall – ICC Building Inspector Certification
- Roofing – National Roofing Contractors Association

REASON:

The Office administers an examination for the certification of hospital inspectors. The examination is designed to measure a candidate’s technical competence as well as knowledge of OSHPD administrative procedures. The examination for Class A and B Inspectors covers a broad range of technical areas, as well as administrative and procedural requirements. Certification as a Class C Inspector, however, allows a candidate to inspect a single area of technical expertise.

Numerous code-publishing, professional and technical organizations issue certifications in various technical specialties. For Class C specialty inspectors, these certifications may serve to demonstrate their technical competence in their area of specialty. The Office must still administer an examination for knowledge of administrative and procedural requirements.

<u>ORIGINAL SIGNED</u>	<u>8/18/05</u>
Kurt A. Schaefer	Date

FILE NO. 1-11.1

DATE: October 20, 2000

CODE APPLICATION NOTICE**CODE SECTION:** Title 24, Part 1, Chapter 6, Article 11, Section 11.1 (TABLE 11.1)**11.1 NONSTRUCTURAL PERFORMANCE CATEGORIES**

Each building shall be assigned a Nonstructural Performance Category (NPC), based upon the degree of anchorage and bracing of selected nonstructural elements and systems. This includes architectural, mechanical, electrical, and hospital equipment in addition to associated conduit, ductwork, piping, and machinery. NPCs are defined in Table 11.1

Excerpt from Table 11.1, Nonstructural Performance Categories

Timeframes	Nonstructural Performance Category	Description
January 1, 2002	NPC 2	The following are braced or anchored in accordance with Part 2, Title 24 ¹ : <ul style="list-style-type: none"> • Communications systems; • emergency power supply; • bulk medical gas systems; • fire alarm systems; and • emergency lighting equipment and signs in the means of egress.

1. For the purposes of Article 11, all enumerated items within Table 11.1 shall meet the requirements of Section 1630B by the specified timeframe as indicated by their respective NPC.

INTERPRETATION:

Hospitals shall identify the means of egress for each building subject to the provisions of SB 1953, NPC-2. For the purposes of NPC-2 compliance, the 1995 CBC, Title 24, Part 2, Volume 1, Chapter 10, Section 1001.2.3 "Exit" may be used to identify the means of egress. Emergency lighting equipment in the means of egress shall be taken to mean all light fixtures required for exit illumination, as specified in 1995 CBC, Title 24, Part 2, Volume 1, Chapter 10, Section 1012.1 "Exit Illumination," as well as any other light fixtures on the same emergency power circuit.

All light fixtures on the emergency circuit powering exit illumination, when mounted to the ceiling system, shall be installed in accordance with the 1998 CBC, Title 24, Part 2, Volume 1, Chapter 25, Section 2501A.5.4.2, "Ceiling Fixtures." Fixture support wires shall be installed in accordance with the 1998 CBC, Title 24, Part 2, Volume 1, Chapter 25, Section 2501A.5.7.1, "Vertical hangers". Alternatively, light fixtures may be braced for seismic forces in accordance with all applicable requirements of Title 24, Part 2.

REASON:

The NPC-2 performance level is intended to enhance the ability to safely evacuate a building following a strong earthquake. NPC-2 identifies emergency lighting equipment and signs in the means of egress as one of five nonstructural systems critical to the attainment of the desired performance level.

The approach outlined above has been developed to assist the industry in identifying the emergency lighting equipment subject to the NPC-2 anchorage and bracing provisions. It should be noted that NPC-2 requires bracing of emergency lighting equipment only if it is currently installed. There is no NPC-2 requirement for installation of exit illumination in a building if it does not currently contain it. If a building does contain emergency lighting, the principal requirement is that the light fixtures providing exit illumination function following strong ground shaking.

Experience has shown that unbraced light fixtures will function following an earthquake, provided:

1. There is an operating source of power, and
2. The fixtures do not fall from the ceiling.

Since the intent of NPC-2 is that the building be evacuated in an orderly manner, the fixtures must be prevented from falling from the ceiling, as opposed to bracing the fixtures to limit all movement. Typically, there is slack in the wiring between light fixtures, and some displacement of the light fixtures in a strong earthquake can be tolerated. However, movements large enough to break the exit illumination circuit must be avoided. In some facilities, this will mean bracing light fixtures that are not in the means of egress, but that are on the same circuit as fixtures providing exit illumination. Compliance with all SB 1953 requirements for NPC's 3, 4, and 5 must be provided by the 2008 or 2030 deadlines, as applicable.

ORIGINAL SIGNED

10/20/00

Kurt A. Schaefer

Date

FILE NO. 1-1.5.2

DATE: March 1, 2002

CODE APPLICATION NOTICE

CODE SECTION: Section 1.5.2, Paragraph 1, Article 1, Chapter 6, Part 1, Title 24, California Building Standards Administrative Code

1.5.2 Delay in Compliance

1. The Office may grant the hospital owner an extension to the January 1, 2008 seismic compliance deadline for both structural and nonstructural requirements if compliance will result in diminished health care capacity which cannot be provided by other general acute care hospitals within a reasonable proximity.

1.1 Hospital owners requesting an extension in accordance with Section 1.5.2 must submit an application form to the Office by January 1, 2007. The application form shall be accompanied by a statement explaining why the hospital is seeking the extension to the January 1, 2008 seismic compliance deadline. The statement shall include, at a minimum, the following information:

(a) The length/duration of the extension request;

(b) The hospital buildings requiring an extension; and

(c) The acute care services that will be completely or partially unavailable if the extension is denied.

1.2 The hospital owner shall request an extension for seismic compliance in one year increments, up to a maximum of five (5) years, beyond the mandated year of compliance. The hospital owner shall also submit an amended compliance plan and schedule in accordance with Section 1.4.5 indicating when compliance will be obtained.

1.5 Delay in Compliance

~~1. After January 1, 2008, any general acute care hospital which continues acute care operation must be at a minimum of an SPC-2 facility as defined in Article 2, Table 2.5.3 or shall no longer provide acute care services.~~

~~2. The Office may grant the hospital owner a delay to Section 1.5.1 if compliance will result in diminished health care capacity which cannot be provided by other general acute care hospitals within a reasonable proximity.~~

~~2.1 Hospital owners seeking a delay must submit a written request to the Office including a statement with supporting documentation regarding the reason for noncompliance with subdivision 1.5.1 and a schedule indicating when compliance will be obtained. A delay request and compliance schedule may be submitted simultaneous with~~

(Additions or changes indicated by underline; deletions by strikeout.)

~~the hospital's evaluation and compliance plan pursuant to the requirements of this article. If a delay request is submitted after the seismic evaluation report, compliance plan and schedule, the request must include an amended compliance schedule and must be submitted to the Office no later than January 1, 2007.~~

~~2.2 The time extension for compliance shall be granted in one year increments, up to a maximum of five (5) years, beyond the mandated year of compliance. The facility requesting the extension shall provide evidence of efforts to implement an approved compliance plan which may include design/construction contracts and schedules which demonstrate efforts to implement the compliance measures within the requested period of extension.~~

REASON:

The purpose of this Code Application Notice (CAN) is to provide an interpretation of Section 1.5.2, Paragraph 1, of Title 24, Part 1, Chapter 6, to provide hospital owners with a suggested an acceptable procedure for requesting a compliance extension pursuant to the regulations for diminished health care capacity. The Office has received numerous inquiries regarding the type of information that would support a request for an extension. In addition to the minimum requirements of Section 1.5.2, subparagraph 1.1, this This CAN suggests some of the types of information and documents that may be included when submitting a request for an extension based on a demonstration that diminished health care capacity will result if a hospital is required to comply with the January 1, 2008, SPC/NPC requirements. ~~The request may include some or all of the items listed in this CAN.~~ Each hospital must decide how best to provide the Office with sufficient information to grant an extension.

OSHPD's granting of an extension will be based on confirmation of the data submitted by the hospital and a finding that diminished capacity would result if the requested extension were not granted. Once the extension is granted, the Office will not revoke the approved extension request.

INTERPRETATION:

ADMINISTRATIVE PROCEDURE

A hospital owner may request an extension in complying with the January 1, 2008, SB 1953 (Chapter 740, Statute 1994) requirements for any hospital building, pursuant to Section 1.5.2, paragraph 1, of Title 24, Part 1, Chapter 6, by submitting to the Office of Statewide Health Planning and Development (OSHPD) an extension request application accompanied by ~~the~~ types of information and documents suggested listed below. The hospital owner need only submit one application per general acute care hospital license, regardless of the number of noncompliant buildings for which the owner is seeking ~~a delay~~ an extension.

(Additions or changes indicated by underline; deletions by strikeout.)

~~In order to support~~ For the Office to consider a request for a compliance extension based on diminished health care capacity, the following written information must be provided ~~would be helpful to the Office in considering an extension request:~~

- ~~1. Identification of the~~ The buildings for which you are requesting the a time extension is requested.
- ~~2. Section 1.5.2.2.2 allows an extension for compliance in one-year increments up to a maximum of five years. Indicate t~~ The duration of the time extension requested for each building in one-year increments, up to a maximum of five (5) years. Also, indicate whether the extension request is for a total of one, two, three, four or five years. Requests for time extensions of partial years (i.e. 2.5 or 3.25 years etc.) will be returned for resubmittal.
- ~~3. Identification of the basic and/or supplemental acute care services that are currently being provided in the hospital building(s) for which this delay is requested and provision of the numbers of patients served by each acute care service.~~
- ~~4. Identification of the~~ The service(s) that would be completely or partially unavailable in the hospital's primary service area if the request for an extension is denied. For purposes of this CAN, the hospital primary service area means the geographic region of the population served by the hospital as identified by zip code(s). The hospital's primary service area is generally defined as those zip codes which include at least 75% of the residences of the hospital's patients. This hospital primary service area will define the limits of reasonable proximity. NOTE: If the hospital's primary service area is different than what is defined in this CAN, then the hospital shall include in the extension request the definition of its primary service area and an explanation of why the hospital's definition is more appropriate for purposes of the request.

The following additional information would also be helpful to the Office in considering an extension request:

1. The basic and/or supplementary acute care services that are currently being provided in the hospital buildings(s) for which the delay is requested and the numbers of patients served by each acute care service.
2. Provision of data and a A narrative description and supporting data of the effect that complying with the January 1, 2008 requirements will have on the patient capacity of acute care services within the hospital's primary service area.
- ~~63.~~ Identification of each Each payer category (i.e. Medi-Cal, Medicare, private coverage, or county indigent programs) by percentage of the population served within the hospital's primary service area and how they will be impacted if the time extension request is denied.

(Additions or changes indicated by underline; deletions by strikeout.)

- 74. ~~Identification of each~~ Each type of insurance coverage by percentage of the population served within the hospital's primary service area and how they will be impacted if the time extension request is denied. As a minimum, the following categories should be included in types of insurance coverage: (~~Health Maintenance Organization (HMO) managed care - Knox Keene/Medi-Cal County Organized Health Systems, other managed care - Preferred Provider Organization (PPO), Exclusive Provider Organization (EPO) and Exclusive Provider Organization with Point-of Service Option (POS), and fee-for-service~~).

- 85. ~~Provision of a~~ A map of the hospital's primary service area that includes the following information:
 - ~~Identification of the~~ The zip code(s) of the population served within that service area, and
 - ~~Identification of any~~ The location of any other general acute care hospital(s) within the service area.

Hospital owners are required, by Section ~~1.5.2.2.1~~ 1.5.2, Subparagraph 1.2, to submit an amended compliance plan that reflects the timeline of the requested compliance extension period. **Exception:** If the original compliance plan that was submitted with the hospital seismic evaluation already reflects this information, an amended compliance plan will not be necessary.

Authority: Section 104.2.1 of Title 24, Part 2, California Building Code

ORIGINAL SIGNED	9/20/04
Kurt A. Schaefer	Date

(Additions or changes indicated by underline; deletions by strikeout.)

FILE NO. 1-7-125(d)

DATE: January 28, 1998

CODE APPLICATION NOTICE

CODE SECTION: Sections 7-125(d) and 7-131(g), Article 3, Chapter 7, Part 1, Title 24, California Code of Regulations

7-125(d) . . .

The Office places its stamp on the original reproducible drawings and the master cover sheet of the specifications when they have been corrected to comply with these regulations. . . .

7-131(g) After the Office has made its check of the submitted documents and the applicant has corrected the originals accordingly, the stamp of the Office of Statewide Health Planning and Development, shall be placed on the original reproducible drawings and the master cover sheet of the specifications. . . .

INTERPRETATION:

In the past, “original reproducible drawings” were interpreted by OSHPD to mean original drafted tracings, because in the past reproduction methods were limited. Today, however, “original reproducible drawings” can be any documents that are reproducible and contain the stamp and original wet signature of the responsible design professional, and any other consulting engineers involved in the preparation of the drawings.

REASON:

This new interpretation allows the design professional to present plans for OSHPD approval in any medium (tracings, linen, mylar, sepia, blueprints, and blueines, etc.) he or she chooses, as long as they contain the stamp and original wet signature of the responsible design professional and consultants.

The following are all acceptable scenarios for obtaining a stamped set of plans from OSHPD:

1. Two sets of prints with design professionals stamp and signature are presented. We stamp all sheets for the designer and/or owner on one set and stamp the cover sheet for our set and issue a plan approval letter.
2. One set of tracings and one set of prints with design professionals stamp and signature are presented. We stamp all sheets of the tracings and stamp the cover sheet of the prints for our set and issue a plan approval letter.

3. Only one set of tracings with design professionals stamp and signature are presented. We stamp tracings and issue a confirm stamping letter indicating when we receive a set of prints indicating our stamp we will then issue a plan approval letter.

<u>ORIGINAL SIGNED</u>	<u>2/17/98</u>
Kurt A. Schaefer	Date

CODE APPLICATION NOTICE**SUBJECT:** Testing, Inspection and Observation Program**CODE SECTION:**

7-141 (d) The architect or engineer of record in general responsible charge of the work shall prepare a testing, inspection and observation program which shall be submitted to the Office for approval prior to the issuance of the building permit.

(e) The testing program shall identify materials and tests to be performed on the project. The firm(s) and/or individual(s) to perform each of the required tests shall also be identified. The testing program shall include, at a minimum, those tests required by applicable sections of the California Building Standards Code.

(f) The testing program shall include a completed application for inspector(s) of record for the project. If a project has more than one inspector of record, the distribution of responsibilities for the work shall be clearly identified for each inspector of record. The inspection program shall also identify all special inspections to be performed on the project and the individual(s) to perform the inspections. The special inspections shall include, at a minimum, those special inspections required by applicable sections of the California Building Standards Code.

(g) The observation program shall identify each professional that must, through personal knowledge as defined in Section 7-151, verify that the work is in compliance with the approved plans and specifications. The contractor or owner/builder and the inspector(s) of record shall verify that the work is in compliance with the approved plans and specifications in accordance with the requirements for personal knowledge as it applies to each participant or discipline. The program shall give specific intervals or project milestones at which such observation is to occur for each affected participant or discipline. Each required observation shall be documented by a compliance verification report prepared by each participant or discipline and submitted to the office.

(h) The tests, inspection and observation program shall include samples of test and inspection reports and provide time limits for the submission of reports.

(i) All completed test, inspection and observation reports shall be submitted to the Office.

INTERPRETATION:

The requirements of this Code Application Notice (CAN) apply to all new projects received on or after November 1, 2002.

In order to ensure that the testing, inspection and observation are accomplished in compliance with applicable code requirements, a written testing, inspection and observation program shall be submitted to the Office for review and approval. The testing, inspection and observation program shall accompany the plan review submittal to the Office, and may be separately bound or incorporated into the plans or specifications. In addition, the testing, inspection and observation

program shall include samples of test and inspection reports and provide time limits for the submission of these reports. Suggested forms ~~are attached to this CAN, and may also~~ may be downloaded from the OSHPD website at www.oshpd.ca.gov/fdd/.

Note that while many of the tests and inspections required by the code are included on the ~~attached~~ forms, they are not intended to provide an exhaustive list of tests and inspections. The ~~attached~~ forms are provided as a suggested format for complying with the requirements of the code. Use of the ~~attached~~ forms is not required for compliance with the applicable codes. However, whether the ~~attached~~ guideline or another format is used, it is the responsibility of the architect or engineer in responsible charge to ensure that all tests, inspections and observations required by code are included in the program.

The following approvals are required for the testing, inspection and observation program:

- Prior to plan approval, the Office will evaluate the testing, inspection and observation program for compliance with testing and special inspections required by the Title 24, Building Standards Code and for the adequacy of the observation specified for the project.
- Prior to the issuance of the building permit, the Office will review the application and qualifications of the Inspector of Record, and the qualifications of other designated firms and individuals responsible for performing special testing, inspection and observation (special inspectors).

The testing, inspection and observation program may be approved with comments, contingent upon the review of the qualifications for special inspectors being completed prior to commencement of the related work.

All testing specified in the program requires documentation substantiating the satisfactory completion and performance of the work. All observations and special inspections specified by the program require the submittal of a verified compliance report to the Office.

REASON:

The architect or engineer in responsible charge of the work is required to prepare and submit a testing, inspection and observation program to the Office for approval prior to issuance of a building permit. (Title 24, Part 1, Section 7-141)

The ~~attached~~ guideline has been developed to assist the industry with the preparation and implementation of the testing, inspection and observation program. While this guideline may be suitable for many projects, very large or complex projects may require the development of a

project specific testing, inspection and observation program. Simple, uncomplicated projects may require minimal observation and few (if any) tests or special inspections. However, regardless of the size or complexity of the project, a testing, inspection and observation program is required.

ORIGINAL SIGNED

3/1/05

Kurt A. Schaefer

Date

CODE APPLICATION NOTICE

FILE NO. 1-7-2100
DATE: May 23, 2002

CODE SECTIONS:

- a. Article 21, Part 1, title 24, Plan Review, Building Inspection and Certification of Surgical Clinics, Chronic Dialysis Clinics and Outpatient Services Clinics
- b. OSHPD 3 amendments, Section 422A, and other applicable provisions in the 2001 California Building Code
- c. 2001 California Mechanical Code, including Tables 4-A and 4-B
- d. 2001 California Plumbing Code
- e. 2004 California Electrical Code
- f. 2001 California Fire Code

INTERPRETATION:

In order to determine the applicability of OSHPD 3 requirements, it is necessary to know if the clinic facility is licensed, and if so, how it is licensed. OSHPD 3 requirements for clinics only apply to clinics that are licensed pursuant to Health and Safety Code (H&S) Section 1200 (which includes primary care clinics and specialty clinics) or H&S 1250 (which includes outpatient clinical services of a licensed hospital). Where the term "clinic" or "outpatient facility" is used relative to OSHPD 3 requirements in the California codes, it shall mean a clinic or outpatient facility licensed pursuant to H&S 1200 or 1250.

The application of OSHPD 3 requirements is independent of the determination of occupancy classification. A Group B Occupancy doctor's office is subject to OSHPD 3 requirements if the office is licensed as a clinic pursuant to H&S 1200. Conversely, a surgical clinic classified as a Group I, Division 1.2 occupancy is not subject to OSHPD 3 requirements if it is not licensed pursuant to H&S 1200 or 1250.

It should be noted that other requirements, not enforced by OSHPD or the local building jurisdiction may apply, for example, the NFPA 101 Life Safety Code.

The attached documents are intended to assist local building jurisdictions and designers in applying OSHPD 3 regulations, and determining which jurisdiction has authority over the plan review, certification and construction inspection of clinic facilities.

- **California Medical Clinic Guidelines, Plan Review, Approval, Inspection and Certification Flowchart.** Provides a process to follow in determining the appropriate authority having jurisdiction and applicable regulations for various clinic facilities.
- **Flowchart Explanatory Notes.** Provides additional information to use in applying the flowchart.
- **Definition of Terms.** Defines common terms, acronyms and roles of agencies involved in the plan review, certification and inspection of clinic facilities.

REASON:

Determination of which clinics and outpatient facilities are subject to the OSHPD 3 requirements found in the California Building Standards Code is complex. This results in a lack of consistency in application of the model code and OSHPD 3 requirements to clinic facilities, and uncertainty regarding the roles of the local building jurisdiction and OSHPD in the plan review, certification and construction inspection processes.

Confusion exists, in part, because the use of the generic terms “outpatient facilities and clinics.” The OSHPD 3 requirements found in the code apply only to those outpatient facilities and clinics that are licensed pursuant to Health and Safety Code Section 1200 or 1250. There are variables in statute and regulations regarding the use and licensing of these clinic facilities, making consistent application of the regulations complex.

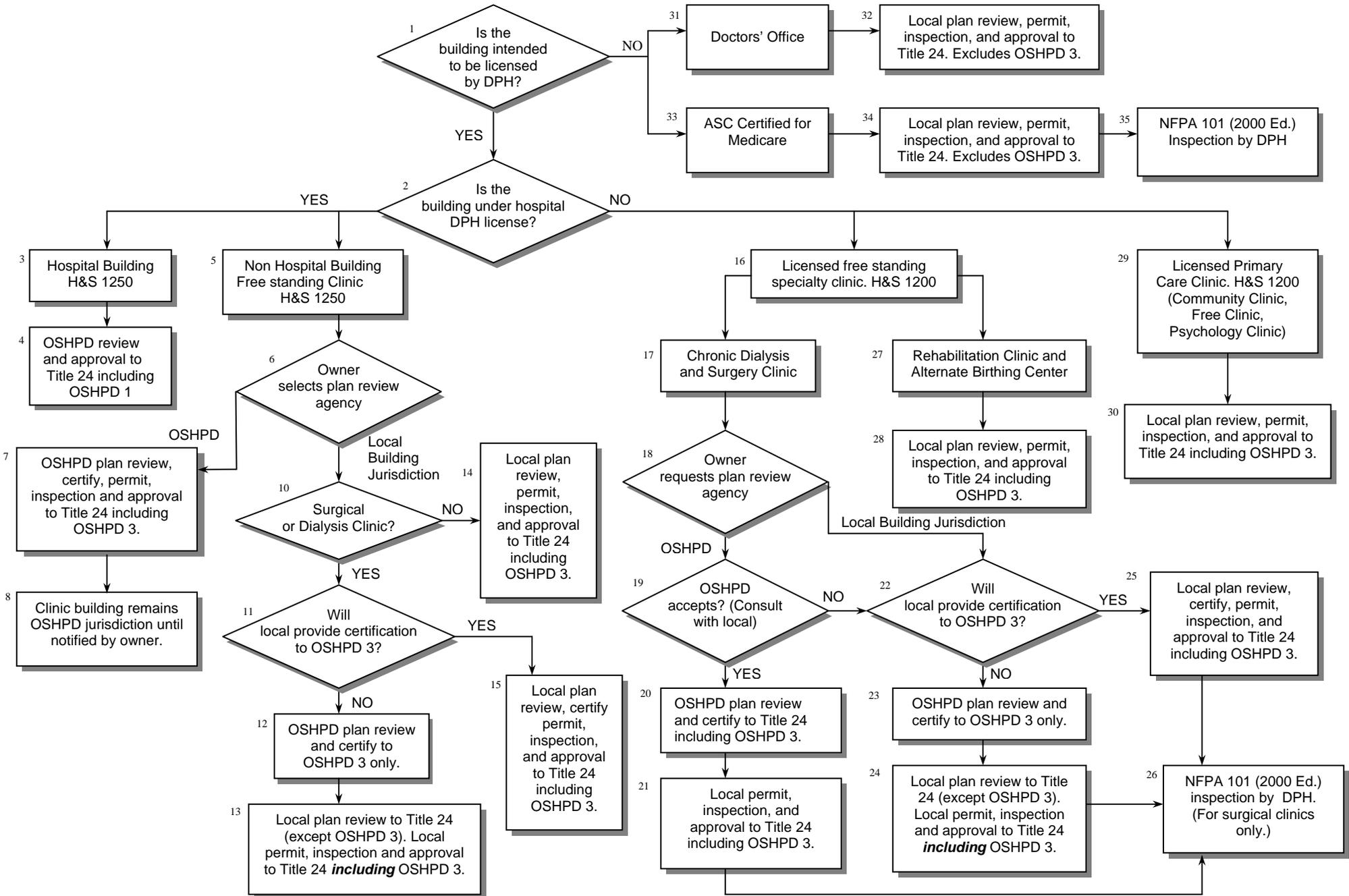
Another source of confusion is that the applicability of certain requirements is determined by factors that are normally out of the scope of work of the building department and designer. For example, sources of financial reimbursement and the specific type of license a clinic owner desires to obtain determine what regulations apply and who has jurisdiction for the project.

ORIGINAL SIGNED	09/14/2007
John D. Gillengerten	Date

California Medical Clinic Guidelines

Plan Review, Approval, Inspection and Certification

(Note: Unless otherwise noted, compliance to CCR Title 24 including OSHPD 3 is required.)
 Number at upper left hand corner of boxes indicate notes in following section.



California Medical Clinic Guidelines Plan Review, Approval, Inspection and Certification

Explanatory Notes (Keyed to numbers at upper left corners of boxes on flowchart.)
Citations are from the Health and Safety Code and Title 24, Part 1, Chapter 7.

1. If the clinic is not licensed by DPH, Licensing and Certification, compliance and certification to the requirements of OSHPD 3 are not required.
2. How a clinic is licensed will affect which sections of the regulations apply, how they are applied and by what agency (local building jurisdiction or OSHPD).
3. "Hospital building" is defined in Health and Safety Code section 1250. OSHPD preempts the local building jurisdiction for enforcement of the California Building Standards Code.
4. Hospital buildings are subject to OSHPD jurisdiction, and must comply with OSHPD 1 requirements in Title 24, CCR.
5. Free standing clinic buildings under the hospital license are normally subject to the local building jurisdiction, although they are licensed under Health and Safety Code section 1250.
6. The owner or governing authority may submit directly to the local building jurisdiction, or may select OSHPD to perform the plan review and certification for free standing hospital outpatient clinics.
7. If the governing authority selects OSHPD to perform the plan review and certification responsibilities for a free standing hospital licensed outpatient clinic, then the entire project, including plan review and approval (to Title 24 including OSHPD 3 requirements), building permit and construction inspection is under OSHPD jurisdiction. The requirement for written certification to OSHPD 3 requirements applies to surgical and dialysis clinics only.
8. Clinic buildings that have been reviewed by OSHPD will remain under the jurisdiction of the Office until the owner or governing authority notifies OSHPD otherwise in writing.
9. Not used.
10. Written certification of compliance to OSHPD 3 is required for surgical and dialysis clinics.
11. If plans are submitted to the local building jurisdiction, the local building jurisdiction must notify the owner or governing authority if their review will include written certification for OSHPD 3 conformance.

12. If the local building jurisdiction will not provide written certification to OSHPD 3 requirements, then plans shall be submitted to OSHPD for plan review and certification to OSHPD 3 requirements only. The local building jurisdiction shall review the plans for compliance to Title 24 excluding OSHPD 3.
13. Concurrent with OSHPD's review to OSHPD 3 requirements, the local building jurisdiction reviews the plans for compliance to Title 24, CCR, except OSHPD 3. The local building jurisdiction shall also issue the building permit and perform construction inspection to Title 24 including OSHPD 3 requirements.
14. Written certification from the local building jurisdiction to OSHPD 3 is not required for clinics other than surgical and dialysis clinics. However, conformance to OSHPD 3 requirements is required.
15. If the local building jurisdiction will provide written certification to OSHPD 3 requirements, then the entire project, including plan review and approval, building permit and construction inspection for the project is under the local building jurisdiction.
16. Licensed free standing specialty clinics are defined in Health and Safety Code section 1200. Specialty clinics include surgical, chronic dialysis, and rehabilitation clinics and alternate birthing centers. All specialty clinics are required to conform to the requirements of OSHPD 3.
17. Written certification to OSHPD 3 is required for licensed surgical and dialysis specialty clinics, and only these specialty clinics may be reviewed and certified by OSHPD.
18. The owner or governing authority must submit plans directly to the local building jurisdiction, or may request OSHPD to perform the plan review and certification for surgery and dialysis specialty clinics.
19. OSHPD must consult with the local building jurisdiction, and either accept or not accept the clinic project for plan review. One purpose for this consultation is to determine whether or not the local building jurisdiction will issue a building permit and inspect construction for a project for which OSHPD did the plan review. If the local building jurisdiction is unwilling or unable to do this, OSHPD cannot accept the review.
20. If, after consultation with the local building jurisdiction, OSHPD accepts plan review, then OSHPD must perform a complete plan review of Title 24 requirements, including OSHPD 3. The local building jurisdiction is not involved in plan review.
21. The local building jurisdiction must issue the building permit and perform construction inspection to Title 24 including OSHPD 3.

22. If plans are submitted to the local building jurisdiction, the local building jurisdiction must notify the owner or governing authority if their review will include certification for OSHPD 3 conformance.
23. If the local building jurisdiction will not provide written certification to OSHPD 3 requirements, then plans shall be submitted to OSHPD for plan review and certification to OSHPD 3 requirements only. The local building jurisdiction shall review the plans for compliance to Title 24 excluding OSHPD 3.
24. Concurrent with OSHPD's review to OSHPD 3 requirements, the local building jurisdiction reviews the plans for compliance to Title 24, CCR, except OSHPD 3. The local building jurisdiction shall also issue the building permit and perform construction inspection to Title 24 including OSHPD 3.
25. If the local building jurisdiction will provide written certification to OSHPD 3 requirements, then the entire project, including plan review and approval, building permit and construction inspection for the project is under the local building jurisdiction.
26. The Department of Public Health will inspect surgical clinics for compliance to NFPA 101.
27. Rehabilitation clinics and alternate birthing centers are not subject to OSHPD review or certification.
28. Rehabilitation clinics and alternate birthing centers are under the jurisdiction of the local building jurisdiction only. Conformance to OSHPD 3 is required.
29. Primary care clinics, as defined in Health and Safety Code Section 1200 are required to conform to the requirements of OSHPD 3, and certification to Primary Care Clinic OSHPD 3 may be required. Primary Care Clinics may include Community Clinics, Free Clinics, and Psychology Clinics.
30. Primary Care Clinics are under the jurisdiction of the local building jurisdiction only. Conformance to OSHPD 3 is required.
31. Doctor offices not licensed as clinics are not subject to OSHPD 3 regulations or certification.
32. These buildings are reviewed by the local building jurisdiction, and are not subject to OSHPD 3 regulations or OSHPD plan review.
33. If an Ambulatory Surgical Center (ASC) licensed for Medicare reimbursement only is not licensed as a specialty clinic, conformance and certification to OSHPD 3 are not required.

- | 34. These facilities are reviewed by the local building jurisdiction, and are not subject to OSHPD 3 regulations or OSHPD plan review.
- | 35. The Department of Public Health will inspect Ambulatory Surgical Centers for compliance to NFPA 101.

DEFINITIONS

Certification:

Certification for Medicare and/or Medicaid – (Not related to OSHPD 3 certification requirements) A process to determine the eligibility of health care providers for reimbursement under the Medicare and/or Medicaid (Medi-Cal) programs. Certification for Medicare is provided by CMS, based on recommendation by DPH. Certification for Medi-Cal is provided by DPH.

OSHPD 3:

Certification of Nonhospital Freestanding Building Outpatient Clinical Services (H&S 1250 and 129730): A written document from the local building jurisdiction or OSHPD stating that design drawings, specifications and/or construction for surgical or dialysis services licensed clinics are in compliance with applicable OSHPD 3 requirements. This certification is only for OSHPD 3 requirements, and is in addition to the normal plan review process provided by the local building official. Certification to OSHPD 3 requirements is a completely separate process from certification for Medicare and/or Medicaid.

Certification of Licensed Freestanding Specialty Clinics (H&S 1200): A written document from the local building jurisdiction or OSHPD stating that design drawings, specifications and/or construction for surgical or dialysis licensed clinics are in compliance with applicable OSHPD 3 requirements. This certification is only for OSHPD 3 requirements, and is in addition to the normal plan review process provided by the local building jurisdiction. Certification to OSHPD 3 requirements is a completely separate process from certification for Medicare and/or Medicaid.

Certification to Primary Care Clinic (H&S 1200) – A primary clinic may establish compliance with the minimum construction standards of adequacy and safety for the physical plant by submitting written certification from a licensed architect or a written statement from a local building jurisdiction that design drawings, specifications and/or construction for specified licensed clinics are in compliance with applicable OSHPD 3 requirements

Clinic – An outpatient health facility which provides direct medical, surgical, dental, optometric, or podiatric advice, services, or treatment to patients who remain less than 24 hours. (H&S 1200.1) (See also Outpatient Clinical Services of a Licensed Hospital.)

Dental Clinic – Provides comprehensive dental services, and is licensed as a Primary Care Clinic by DPH. A Dental Office provides comprehensive dental services to patients, but is not a licensed clinic.

Employee Clinic – Operated by an employer or jointly by two or more employers for their employees only, or by a group of employees, or jointly by employees and employers, without profit to the operators thereof or to any other person, for the

prevention and treatment of accidental injuries to, and the care of the health of, the employees comprising the group. Employee clinics are specifically exempted from licensure requirements of H&S Code, Division 2, Chapter 1, Clinics. (H&S 1206(n))

Optometric Clinic – Provides comprehensive eye services to patients. May be licensed as a Primary Care Clinic or Surgical Clinic. An Optometric Office provides optometric services, but is not a licensed clinic.

Primary Care Clinic – Clinics specified in subdivision (a) of Health and Safety Code Section 1204:.

Community Clinic – a clinic operated by a tax-exempt nonprofit corporation that is supported and maintained in whole or in part by donations, bequests, gifts, grants, government funds or contributions, that may be in the form of money, goods, or services. In a community clinic, any charges to the patient shall be based on the patient's ability to pay, utilizing a sliding fee scale. No corporation other than a nonprofit corporation, exempt from federal income taxation under paragraph (3) of subsection (c) of Section 501 of the Internal Revenue Code of 1954 as amended, or a statutory successor thereof, shall operate a community clinic; provided, that the licensee of any community clinic so licensed on the effective date of this section shall not be required to obtain tax-exempt status under either federal or state law in order to be eligible for, or as a condition of, renewal of its license. No natural person or persons shall operate a community clinic. (H&S 1204(a)(1))

Free Clinic – a clinic operated by a tax-exempt, nonprofit corporation supported in whole or in part by voluntary donations, bequests, gifts, grants, government funds or contributions, that may be in the form of money, goods, or services. In a free clinic there shall be no charges directly to the patient for services rendered or for drugs, medicines, appliances, or apparatuses furnished. No corporation other than a nonprofit corporation exempt from federal income taxation under paragraph (3) of subsection (c) of Section 501 of the Internal Revenue Code of 1954 as amended, or a statutory successor thereof, shall operate a free clinic; provided, that the licensee of any free clinic so licensed on the effective date of this section shall not be required to obtain tax-exempt status under either federal or state law in order to be eligible for, or as a condition of, renewal of its license. No natural person or persons shall operate a free clinic. (H&S 1204(a)(2))

Psychology Clinic – a clinic which provides psychological advice, services, or treatment to patients, under the direction of a clinical psychologist as defined in Section 1316.5, and is operated by a tax-exempt nonprofit corporation which is supported and maintained in whole or in part by donations, bequests, gifts, grants, government funds, or contributions which may be in the form of money, goods, or services. In a psychology clinic, any charges to the patient shall be based on the patient's ability to pay, utilizing a sliding fee scale. No corporation other than a nonprofit corporation, exempt from federal taxation under paragraph

(3), subsection (c) of Section (501 of the Internal Revenue Code of 1954, as amended, or a statutory successor thereof, shall operate a psychology clinic. (H&S 1204.1) Psychology clinics are eligible for licensure pursuant to H&S Code, Division 2, Chapter 1, Clinics, but are not required to be licensed. (H&S 1206.1)

Specialty Clinic – Types of clinics specified in Health and Safety code subdivision (b) of Section 1204, including surgical clinics, chronic dialysis clinics, rehabilitation clinics and alternate birth centers. Specialty clinics must be licensed by Department of Public Health, **EXCEPT** for surgical clinics that are under a physician’s medical license or corporation.

Alternative Birth Center (ABC’s) – a clinic that provides comprehensive perinatal services and delivery care to pregnant women who remain less than 24 hours at the facility (H&S 1204(b)(4)).

Chronic Dialysis Clinic (ESRD, End-Stage Renal Dialysis) – a clinic that provides less than 24-hour care for the treatment of patients with end-stage renal disease, including renal dialysis services. (H&S 1204(b)(2))

Rehabilitation Clinic – A clinic that, in addition to providing medical services directly, also provides physical rehabilitation services for patients who remain less than 24 hours. Rehabilitation clinics shall provide at least two of the following rehabilitation services: physical therapy, occupational therapy, social, speech pathology, and audiology services. A rehabilitation clinic does not include the offices of a private physician in individual or group practice. (H&S 1204(b)(3))

Surgical Clinic – Provides ambulatory surgical care for patients who remain less than 24 hours. A surgical clinic does not include any place or establishment owned or leased and operated as a clinic or office by one or more physicians or dentists in individual or group practice, regardless of the name used publicly to identify the place or establishment, provided, however, that physicians or dentists may, at their option, apply for licensure. (H&S 1204(b)(1))

Health and Safety Code Section 1200 (and following) – Pertains to licensed clinics not under a hospital license.

Health and Safety Code Section 1250 (and following) – Pertains to “health facilities,” which include general acute care hospitals, and outpatient clinics under a hospital license.

Hospital Building – Hospital building is any building used for a health facility of a type required to be licensed pursuant to Section 1250 of the Health and Safety Code. The facility may also need to comply with NFPA 101 requirements for CMS and JCAHO standards under the Environment of Care. “Hospital building” does not include any building in which outpatient clinical services of a health facility licensed pursuant to Section 1250 are provided that is separated from a building in which hospital services are provided. If any one or more outpatient clinical services in the building provide

services to inpatients, the building shall not be included as a "hospital building" if those services provided to inpatients represent no more than 25 percent of the total outpatient visits provided at the building. Hospitals shall maintain on an ongoing basis, data on the patients receiving services in these buildings, including the number of patients seen, categorized by their inpatient or outpatient status. Hospitals shall submit this data annually to the Department of Public Health.

License – A written authorization to operate a health facility and/or clinic issued by the Department of Public Health.

Local – See Local Building Jurisdiction.

Local Building Jurisdiction (LBJ) – city, county, or city and county building department, and fire authority responsible for enforcing the California Building Standards Code.

National Fire Protection Association (NFPA) STANDARD #101 – Life Safety Code, published by NFPA. Inspections for compliance to 2000 edition of NFPA 101 are performed by DPH.

Outpatient Clinical Services of a Licensed Hospital – A service under a hospital license that provides non-emergency health care services to patients. The Clinic needs to comply with Title 24 requirements including OSHPD 3. NFPA 101 requirements for CMS and JCAHO standards under the Environment of Care may also be applicable. The number of inpatients may represent no more than 25% of the total number of patients served by the clinic. Services provided may include those enumerated in Health and Safety Code section 129730.

OSHPD 3 – Regulations promulgated by OSHPD that apply to licensed clinics and hospital outpatient clinical services provided in freestanding, nonhospital building. See Title 24, Parts 1, 2, 3, 4 and 5 for requirements.

Title 24 (T24) – California Code of Regulations, Title 24, also known as the California Building Standards Code. It includes the following parts:

- Part 1 – California Building Standards Administrative Code
- Part 2 – California Building Code
- Part 3 – California Electrical Code
- Part 4 – California Mechanical Code
- Part 5 – California Plumbing Code
- Part 6 – California Energy Code
- Part 7 – California Elevator Safety Construction Code
- Part 8 – California Historical Building Code
- Part 9 – California Fire Code
- Part 10 – California Code for Building Conservation
- Part 12 – California Reference Standards Code

Roles of Agencies Involved

California Medical Board – Responsible for licensing physicians to provide medical care.

Department of Public Health (DPH) – Verifies that operational requirements are met and issues a license to operate a licensed clinic. DPH also conducts the life safety portion of the survey, enforcing the 2000 edition of NFPA 101, Life Safety Code. Clinics must meet both State and Federal standards as a condition of participation in the Medicare program.

Local Building Jurisdiction (LBJ) – Responsible for plan review, building permit issuance, building construction inspection, and issuance of certificate of occupancy. A written certification of conformance with OSHPD 3 amendments is required for Surgical and Dialysis Clinics. When the local building jurisdiction provides certification, it shall certify within 30 days of the completion of construction that the applicable clinic provisions have been met. The local building jurisdiction may choose not to provide this certification, requiring submittal to OSHPD for plan review and certification.

Local fire department – Enforces all fire and life safety requirements of SFM in Title 24.

Office of Statewide Health Planning and Development (OSHPD) – In consultation with the Community Clinics Advisory Committee, OSHPD shall prescribe minimum construction standards of adequacy and safety for the physical plant of clinics as found in the California Building Standards Code. Additionally, OSHPD may perform a role in the plan review, building inspection and certification process as described in Title 24, Part 1, Article 21, “Plan Review, Building Inspection and Certification of Surgical Clinics, Chronic Dialysis Clinics and Outpatient Services Clinics.”

ACRONYMS

ABC Alternative Birthing Center

ASC Ambulatory Surgical Center

CCR California Code of Regulations

CMS Center for Medicare/Medicaid Services (formerly known as Healthcare Financing Association (HCFA))

DPH Department of Public Health

ESRD End Stage Renal Dialysis

H&S Health and Safety Code

JCAHO Joint Commission Accreditation Hospitals and Organizations known as the Joint Commission

LBJ Local Building Jurisdiction

NFPA National Fire Protection Association

OSHPD Office of Statewide Health Planning and Development

SFM State Fire Marshal

FILE NO. 2-34

DATE: January 14, 1999

CODE APPLICATION NOTICE

CODE SECTIONS:

- a. Section 3403 - Additions, Alterations or Repairs, Part 2, Title 24, 2001 California Building Code.
- b. Section 104, Application to Existing Mechanical Systems, Part 4, Title 24, 2001 California Mechanical Code.
- c. Section 101.5, Application to Existing Plumbing Systems, Part 5, Title 24, 2001 California Plumbing Code.

Section 3403 - Additions, Alterations or Repairs, Part 2, Title 24, 2001 California Building Code

Section 3403.2 When Allowed. Additions, alterations or repairs may be made to any building or structure without requiring the existing building or structure to comply with all the requirements of this code, provided the addition, alteration or repair conforms to that required for a new building or structure. *[For OSHPD 1] the structural additions, alterations or repairs shall meet the requirements of Section 1638A of Chapter 16A of Part 2 of the California Building Code.*

Additions or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code and such additions or alterations shall not cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an addition or alteration will cause the existing building or structure to become structurally unsafe or overloaded, will not provide adequate egress in compliance with the provisions of this code or will obstruct existing exits, will create a fire hazard, will reduce required fire resistance, or will otherwise create conditions dangerous to human life. Any building so altered, which involves a change in use or occupancy, shall not exceed the height, number of stories and area permitted for new buildings. Any building plus new additions shall not exceed the height, number of stories and area specified for new buildings.

[For OSHPD 1] The following provision and exception language of Section 3403.2 does not apply for structural additions, alterations, repairs or seismic retrofits of hospitals. Additions or alterations shall not be made to an existing building or structure when such existing building or structure is not in full compliance with the provisions of this code except when such addition or alteration will result in the existing building or structure being no more hazardous based on life safety, fire safety and sanitation, than before such additions or alterations are undertaken. (See also Section 307.11.3 for Group H, Division 6 Occupancies.)

(Additions or changes indicated by underline; deletions by strikeout)

Section 104 - Application to Existing Mechanical Systems, Part 4, Title 24, 2001 California Mechanical Code.

Section 104.1 Additions, Alterations or Repairs. Additions, alterations or repairs may be made to any mechanical system without requiring the existing mechanical system to comply with all the requirements of this code, provided the addition, alteration or repair conforms to that required for a new mechanical system. Additions, alterations or repairs shall not cause an existing system to become unsafe or create unhealthy or overloaded conditions.

Minor additions, alterations and repairs to existing mechanical systems may be installed in accordance with the law in effect at the time the original installation was made, when approved by the building official. ~~Defective material or parts shall be replaced or repaired in such a manner as to preserve an approval or a listing.~~

Section 104.3 Changes in Building Occupancy. Mechanical systems which are part of any building or structure undergoing a change in use or occupancy, as defined in the Building Code, shall comply with all requirements of this code which may be applicable to the new use or occupancy.

Section 101.5 - Application to Existing Plumbing Systems, Part 5, Title 24, California Plumbing Code.

Section 101.5.1 Additions, Alterations or Repairs. Additions, alterations or repairs may be made to any plumbing system without requiring the existing plumbing system to comply with all the requirements of this Code, provided the addition, alteration or repair conforms to that required for a new plumbing system. Additions, alterations or repairs shall not cause an existing system to become unsafe, insanitary or overloaded.

Section 101.5.4 Changes in Building Occupancy. Plumbing systems which are a part of any building or structure undergoing a change in use or occupancy, as defined in the Building Code, shall comply to all requirements of this Code which may be applicable to the new use or occupancy.

INTERPRETATION:

The purpose of this CAN is to provide owners, designers and authorized plan review and enforcement agencies with a consistent method for planning, reviewing and implementing projects on existing buildings and systems. Historically, these types of projects have proven difficult because of the structure of the code, nonspecific requirements for applicability to existing structures and Title 22 requirements to conform to the current code for any alteration affecting the function of a licensed health facility.

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GENERAL**How to use the Guidelines**

Information is presented as a series of flowcharts which describe the process and a narrative which explains each block on the flowchart. The main document is titled *Health Facility Remodel Flowchart*. It describes the entire process from project inception through construction. Two main points described are a process for pre-design consultation with the Office and how to handle conditions discovered during construction. There are three supporting flowcharts (1) Electrical, (2) Fire and Life Safety and (3) Mechanical, Plumbing, and Medical Gas and Vacuum Systems. These flowcharts are mutually supporting and are meant to be used concurrently to provide an accurate guide for project accomplishment.

Historically, OSHPD has not observed a problem with designers identifying the structural scope of remodels which is why this document does not include structural considerations in the flow charts. However, this CAN may be helpful in determining the scope of work required for non-structural elements, components and systems affected by seismic repairs to existing buildings or structures. As indicated earlier, for OSHPD 1 the structural additions, alterations or repairs shall meet the requirements of Section 1638A of Chapter 16A of Part 2 of the California Building Code. For OSHPD 2 and 3 all projects should be evaluated to insure that they meet the requirements of Chapter 16 of the California Building Code. If a designer has questions regarding the structural considerations on a project, they are encouraged to contact OSHPD.

Alternate Materials and Methods of Construction

These guidelines are not intended to prevent the use of an alternate material or method of construction provided OSHPD approves the alternate. The requirements for alternate materials and methods of construction are shown in Section 105.0 of the 2001 California Mechanical Code, Section 301.2 of the 2001 California Plumbing Code, Section 104.2.8 of the 2001 California Building Code, and Section 90-4 of the 2001 California Electrical Code.

Temporary Installations

OSHPD recognizes that temporary installations are sometimes required to accommodate phasing of construction or to provide a transitional solution to a problem. Because each temporary installation is unique, OSHPD will review each installation on an individual basis. At the discretion of OSHPD, the facility must submit a letter that describes the type of temporary installation, the reason for the installation, how much time the temporary installation will exist, and any additional information required by OSHPD. OSHPD will use the written information to decide the extent of the plan or field review and the allowance of time for the installation. When appropriate, clients shall notify the Department of Health Services, Licensing and Certification Division or the local fire department.

All required temporary construction must be shown on the plans or reviewed by OSHPD field staff. Temporary construction barriers must comply with Code Application Notice No. 9-8705.4. Temporary services or equipment must be provided and shown on the plans for projects that involve

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the replacement of an air handling unit, a medical air compressor, a medical vacuum pump, or similar types of equipment unless it serves unoccupied space. The plans must show the precautions being taken to maintain code compliance in the areas affected by the temporary installation or condition. Temporary installations must not have a negative impact on existing systems nor cause unsafe conditions.

Pre-Design Conference

The flow charts and corresponding narratives are intended as a guide in establishing the level of compliance that OSHPD will require for projects that involve existing buildings and their systems. We encourage our clients to call or meet with OSHPD staff when the flow charts and narratives do not address a specific project or issue, or when it is unclear as to how to proceed with the proposed project.

For the purpose of implementing this CAN, the following guidelines (attached) shall be utilized:

- (1) Health Facility Remodel Flow Chart/Narrative
- (2) Electrical Remodel Flow Chart/Narrative
- (3) Fire and Life Safety Remodel Flow Chart/Narrative
- (4) Mechanical, Plumbing, and Medical Gas and Vacuum Systems Remodel Flow Chart/Narrative

ORIGINAL SIGNED	10/6/05
Kurt A. Schaefer	Date

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TERMS

The following terms are utilized in this guideline. Definitions found in the California Building Standards Code apply.

Change in Function. A change in activity or service provided within the project limits that does not change the use or occupancy.

Change of Occupancy/Use. Change of an occupancy or use defined in Chapter 3 of the California Building Code. (See also Section 3405 California Building Code.)

Change of Occupant Load. Includes a change in the number of occupants and/or a change in the type of occupants including those identified or described as ambulatory, nonambulatory, bedridden, restrained, developmentally disabled, inpatient, outpatient, nonpatient, public, staff, adults, children and infants.

Current Code. California Building Standards Codes and referenced standards in effect at the time of application for plan review. (See CAN 1)

Discovered Condition. An unknown condition found during construction.

Essential Electrical System (EES). This is the system described in California Electrical Code 517-25, 30, 31, 32, 33, 34, 35, 40, 41, 42, 43, 44.

Health Facility. Any health facility licensed pursuant to Section 1250 of the Health and Safety Code under the jurisdiction of the Office.

Load Capacity. This term refers to the rated ability of electrical equipment to carry loads calculated in accordance with the requirements of the California Electrical Code.

Load Capacity Verification. How one determines and documents load capacity. Refer to California Electrical Code and PIN 3-220.

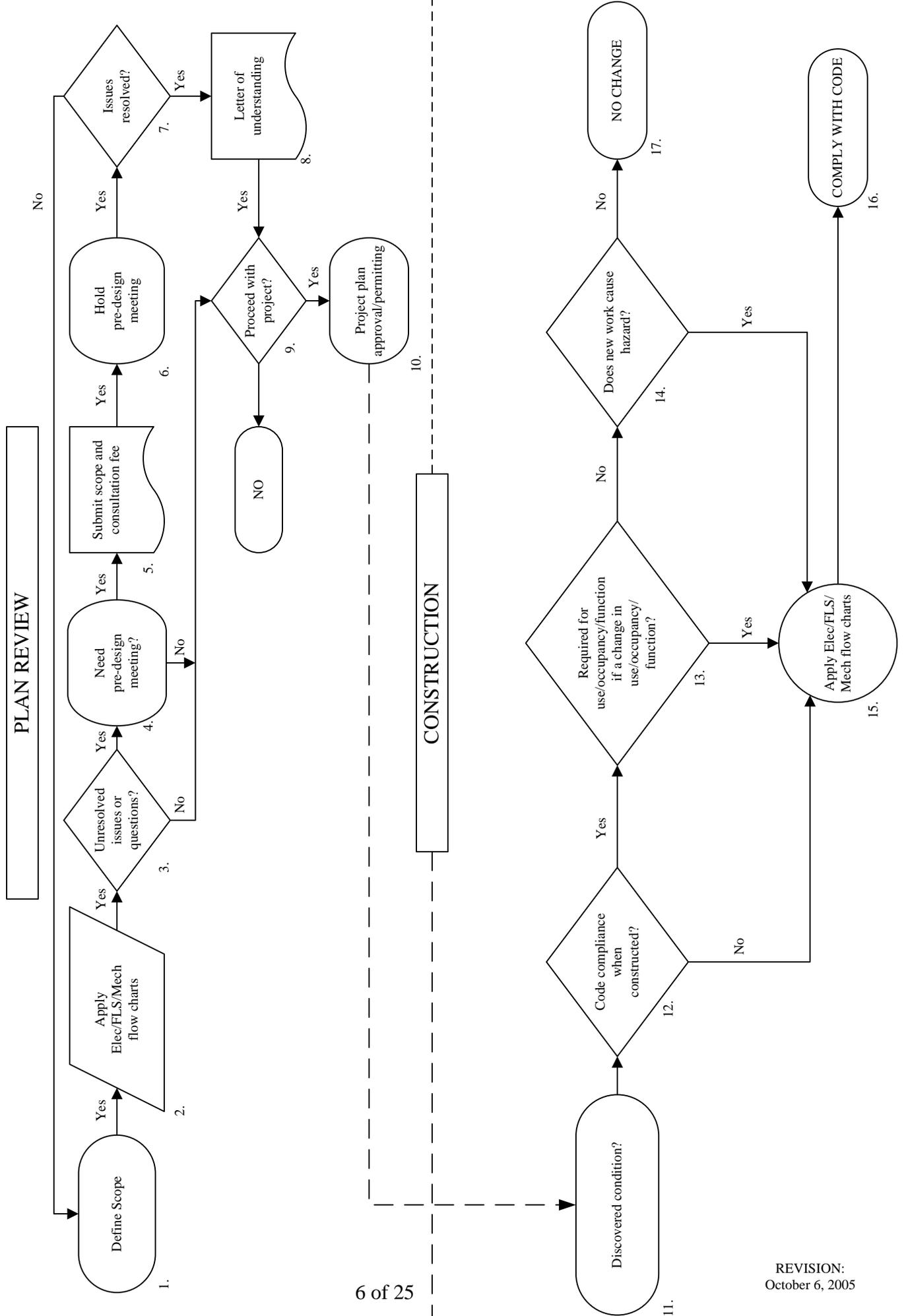
Non-Essential Electrical System (Non-EES). This is normal source system described in California Electrical Code 517-30, 35.

Panel. Any panelboard, switchboard, motor control center, distribution panelboard, etc. Transfer switches and transformers are not defined as panels. Refer to California Electrical Code Articles 100 and 384.

Previous Code. An applicable code under which an existing condition was constructed or installed. It may be a previous edition of the California Building Standards Codes, the Uniform Building Codes, the Life Safety Code or other nationally recognized standards.

(Additions or changes indicated by underline; deletions by strikeout)

HEALTH FACILITY REMODEL FLOW CHART



NARRATIVE FOR HEALTH FACILITY REMODEL FLOW CHART

The following comments apply to the Health Facility Remodel Flow Chart. The chart addresses the design and office plan review process on the upper portion and construction issues on the lower portion. The narrative comments are numbered and correspond with the numbered items on the flow chart.

1. Define Scope.

- a. It is the responsibility of the project team with their client to initially assess the needs of the facility in determining the project scope.
- b. In developing project scope consideration should be given to:
 1. The project objectives
 2. Analysis and assumptions of existing conditions
 3. Key code assumptions (Title 24 and Title 22)
 4. Applicable OSHPD CANs and PINs
 5. Identify change of function.

2. Apply Mechanical / Plumbing, Electrical, Fire & Life Safety Remodel Flow Charts.

Once the project scope is determined, apply Mechanical / Plumbing, Electrical, Fire & Life Safety remodel flow charts to the design alternatives to consider how applicable code requirements may impact the project.

3. Unresolved or Questioned Issues?

If the flow charts lead to a clear understanding of the level of compliance and resolutions of project concerns, the project may proceed.

4. Need Pre-design Meeting?

If the flow charts do not lead to resolutions of project concerns or if questions regarding particular project issues are not addressed it may be advisable to conduct a pre-design meeting with OSHPD.

5. Submit Scope & Consultation Fee.

- a. To take advantage of this service, it is necessary to request, in writing, a consultation pursuant to Section 129835, Health and Safety Code.
- b. Prior to scheduling a pre-design meeting, OSHPD will require the applicant to submit the following:
 1. Meeting Agenda (prepared by the project team) listing major points of discussion
 2. Existing floor plan with impacts on adjacent areas and services
 3. Description / Scope of the remodel (design)
 - (1) Define applicable code sections
 - (2) Define applicable PINs & CANs
 - (3) Possible Program Flexibility, alternate material and methods of construction, and alternate means of protection issues should be listed
 4. Type of construction
 5. Occupancy - existing and proposed with justification
 6. Accessibility considerations, including path of travel

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7. Mechanical / Plumbing /Electrical / Fire and Life Safety considerations
 8. Preliminary exiting plan
 9. Local Zoning / Land use agreements
- c. Fees - OSHPD consultation associated with a pre-design conference shall be billed at an hourly rate to recover actual cost.

6. Hold Pre-design Meeting.

- a. After OSHPD has had the opportunity to review the submitted information the project team will be contacted to set up the pre-design meeting. It is incumbent on the project team to coordinate required meeting attendees and scheduling, i.e. Project Consultants, OSHPD (plan review and compliance, when necessary), Department of Health Services Licensing and Certification, when necessary, and Facility Representatives.
- b. It is envisioned that meetings will be held at OSHPD offices, but in special circumstances may be held at project team offices or project facilities.
- c. During the meeting the OSHPD staff will respond to the issues and concerns of the project team so they have a better understanding of how the project will proceed through the OSHPD process.

7. Issues Resolved.

- a. If the meeting results in resolution of the substantive issues regarding the project it will be recorded in a letter of understanding.
- b. If the meeting does not result in resolution of substantive issues or creates additional questions regarding the project, the project team should reassess the scope in response to the issues and, if necessary, reconvene another meeting with the OSHPD.
- c. Issues that are not satisfactorily resolved in this process may be addressed through the OSHPD appeals process. (See Health and Safety Code, Division 107, Part 7, Chapter 1, Article 5, Section 129925.)

8. Letter of Understanding.

- a. Resolutions will be recorded in a letter of understanding. The letter of understanding will be made available to the project team, the facility representative and will be maintained in the OSHPD project file. The intent of the letter is to document a common understanding for the Basis for Design, Basis for Plan Review and Basis for Field Compliance. The letter will be prepared by the design team and signed by the owner, design professional of record, OSHPD regional supervisor, and OSHPD regional compliance officer.
- b. It should be noted that the letter of understanding is only as good as the assumptions presented at the pre-design meeting. Changes in design, program requirements, project delivery or other unforeseen issues may necessitate modifications to the letter of understanding.

9. Proceed with Project.

The letter of understanding will be utilized by the Office in its application of this CAN to your project.

(Additions or changes indicated by underline; deletions by strikeout)

10. Project Plan Approval and Permitting Process.

- a. The project should be submitted to the OSHPD for review identifying any of the special conditions (program flexibilities, alternate designs, etc.) as resolved and recorded in letter of understanding.
- b. At completion of plan review / approval process any conditions recorded in letter of understanding should be brought to the attention of the OSHPD Regional Compliance Officer at time of permitting.

11. Discovered Conditions.

Existing non-complying conditions are encountered frequently during construction. It must be determined whether non-complying conditions may be allowed to continue or must be corrected in accordance with current building code.

12. Code Complying when Constructed?

It must be determined if the discovered condition was in accordance with applicable codes when it was constructed or installed. Sections 101.3.1 and 3401, California Building Code

13. Required for Use/Occupancy/Function if a change in Use/Occupancy/Function?

When a change of occupancy, use, or function occurs, it must be determined if the discovered condition is required for the new occupancy, use, or function. Section 3403.2, California Building Code.

14. Does new work cause Hazard?

When new construction, elements or systems are provided, it must be determined if they cause an unsafe, unsanitary or hazardous condition or a life safety or fire risk. Section 3403.2, California Building Code.

15. Apply Electrical, Fire & Life Safety, Mechanical / Plumbing Remodel Flow Charts.**16. Comply with Code.**

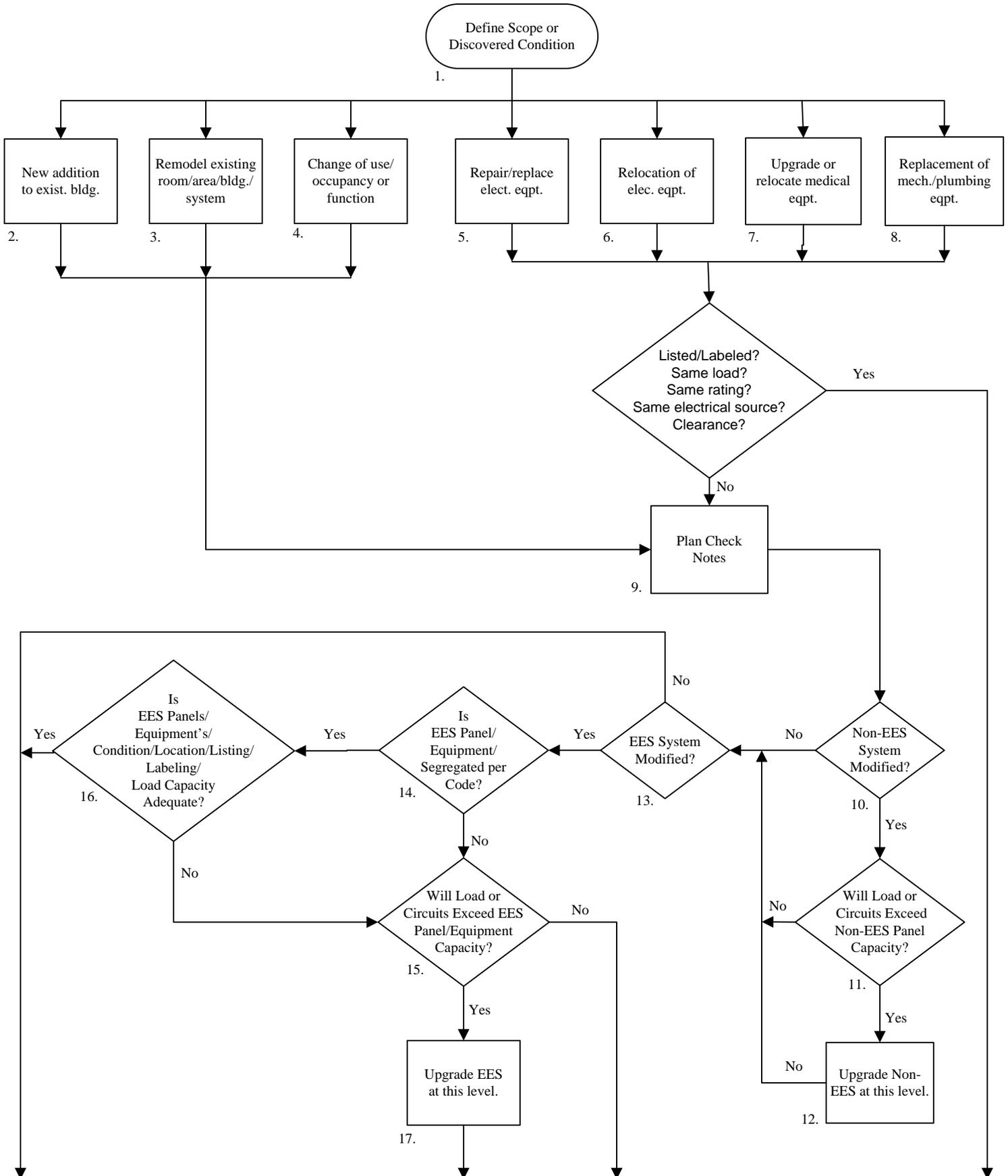
Submit a post-approval document in accordance with Section 7-153, Part 1, Title 24, California Building Standards Code.

17. No Change.

When it is determined that the discovered condition was code complying when constructed or installed, correction is not required as a result of a change in occupancy, use, license, function or an increase in occupant load and new construction, elements or systems do not cause an unsafe, unsanitary or hazardous condition or a life safety or fire risk, no change or correction is required. California Building Code, Sections 101.3.1; 420A.2, Exception 1; 3405, Exception; and 3401.

(Additions or changes indicated by underline; deletions by strikeout)

ELECTRICAL REMODEL FLOW CHART



ALL NEW ELEMENTS OF CONSTRUCTION MUST COMPLY WITH CURRENT CODE

NARRATIVE FOR THE ELECTRICAL REMODEL FLOW CHART

This narrative must be used with the Health Facility Remodel Flow Chart for Electrical Systems. The numbers shown on the Flow Chart correspond to the numbers shown below. The purpose of this narrative is to elaborate on the terminology used in the Flow Chart and to show the code requirements that OSHPD will enforce.

1. Define Scope or Discovered Condition.

- a. It is the responsibility of the project team with their client to initially assess the needs of the facility in determining the project scope.
- b. In developing project scope consideration should be given to:
 1. The project objectives
 2. Analysis and assumptions of existing conditions
 3. Key code assumptions (Title 24 and Title 22)
 4. Applicable OSHPD CANs and PINs
 5. Identify change of function.

2. New Addition To Existing Building.

As the title states, this type of project adds floor space to an existing building. The systems affected by the scope of the project must meet current minimum code requirements. Existing electrical systems, not part of the remodel project scope, but utilized for connection to the systems of the remodel project scope, must be upgraded only if load capacity limits are exceeded as shown in the lower portion of the electrical flow chart.

3. Remodel of Existing Room/Area/Building/System.

The electrical systems directly involved in the scope of the project must meet current minimum code requirements. Existing electrical systems, not part of the remodel project scope, but utilized for connection to the systems of the remodel project scope, must be upgraded only if load capacity limits are exceeded as shown in the lower portion of the electrical flow chart.

4. Change of Use/Occupancy or Function.

An example of this type of situation would be a change of use from a general acute patient care area to skilled nursing beds or an administration area. Another example would be a change of use from a general acute patient care area to a critical care area or an administration area to a patient care area. As indicated in the lower portion of the electrical flow chart, systems, wiring, panels, devices, etc., within the scope of construction would be required to comply with current code requirements. Existing electrical systems not within the scope of construction, but connected to/supplying systems, wiring, panels, devices, etc., within the scope of construction, would only need to be upgraded if load capacity limits are exceeded.

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5. Repair/Replace Electrical Equipment.

This type of project involves repair of existing electrical equipment or replacement of electrical equipment. The repair or replacement of electrical equipment must be accomplished in compliance with Code Application Notice (CAN) 3-110-2. That is, equipment must be listed, labeled, or certified by a Nationally Recognized Testing Laboratory (NRTL). The replacement of a specific piece of electrical equipment must be replaced with equipment of the same type, electrical rating and physical size.

Also, the installation of the equipment must comply with current code requirements.

6. Relocation of Electrical Equipment.

This type of project involves the simple relocation of electrical equipment. In this type of project, there is no change in the electrical source or load. The reinstalled equipment must meet current code requirements for the installation. The electrical system upstream and/or downstream would not need to be upgraded unless the existing load capacity limits have been exceeded.

7. Upgrade/Relocate Medical Equipment.

When medical equipment is upgraded or relocated, the equipment, when finally installed, would be required to meet current code requirements for the actual installation. Also, the requirements of CAN 3-110-2 must be met. That is, equipment when finally installed must be listed, labeled or certified by a Nationally Recognized Testing Laboratory (NRTL). As indicated in the lower portion of the electrical flow chart, existing electrical systems not within the scope of construction, but connected to/supplying the medical equipment, would only need to be upgraded if load capacity limits are exceeded.

8. Replacement of Mechanical/Plumbing Equipment.

Existing electrical systems serving or monitoring the mechanical equipment must be reinstalled to meet the requirements of current code. Existing electrical systems to be reconnected must be code complying in terms of the type of source and branch. That is, the source must be normal, life safety branch, critical branch, or equipment system, as required by current code. If the EES is a non-segregated EES, the existing electrical system to be reconnected must meet current code requirements for either normal source or emergency source connection. Existing electrical systems serving the replaced mechanical equipment do not require upgrade/segregation unless load capacity limits are exceeded as shown in the lower portion of the electrical flow chart.

9. Plan Check Notes.

Load capacity verification shall be provided for panels, panel feeders, and panel feeder overcurrent protective devices at points in the electrical distribution system where modifications occur. A load summary shall be provided per the requirements of OSHPD Policy Intent Notice (PIN) 3-220. For a net load reduction on an affected panel where load is to be added, the requirement for load capacity verification is satisfied. For a net load addition on an affected panel, follow OSHPD PIN 3-220 for the acceptable means of providing load capacity verification. Also, as used herein, the word "panel" is defined as any panelboard, switchboard, motor control center, distribution panelboard, etc. Refer to the

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“Terms” section of this CAN and to PIN 3-220. Submission of verification of compliance with OSHPD PIN 3-220 for affected electrical panels does not relieve the Electrical Engineer from fully complying with Article 220 of the current edition of the California Electrical Code relating to load capacity verification for the electrical system.

All electrical systems, wiring, panels, devices, etc. within the scope of construction shall be code conforming.

10. Non-EES System Modified?

This system is typically the normal source system described in CEC 517-35. The non-EES/branch circuit will not be considered as modified if the scope of construction involves only a simple removal of a load or device. Relocation of an existing load or device, or the addition of a load or device, constitutes a modification of the non-EES/branch circuit.

A “yes” answer leads to block #11: “Will loads or circuits exceed non-EES equipment capacity?”. A “no” answer leads to block #13, “EES system modified?”.

11. Will Load or Circuits Exceed Non-EES Panel Capacity?

This is the non-EES panel to which load is being added. If load capacity verification per OSHPD PIN 3-220 indicates that this panel will be overloaded by the load addition, the panel, its feeder and feeder overcurrent protective device must be brought into conformance with current code requirements. The next panel electrically upstream towards the source must also undergo load capacity verification per the requirements of OSHPD PIN 3-220. If it is also overloaded, it must also be brought into conformance with current code requirements along with its feeder and feeder overcurrent protective device. It is not the intent of this paragraph to relieve the Electrical Engineer from the responsibility of performing load capacity verification calculations on affected feeders all the way back to the main service entrance or to the terminals of a separately derived system as required by Article 220 of the California Electrical Code.

A “yes” answer directs one to block #12. A “no” answer directs one to block #13.

12. Upgrade Non-EES At This Level.

Replace panel, panel feeder, and panel feeder overcurrent protective device per current code requirements. Transformers, transfer switches and other electrical devices which are not panels but which occur at a level in the distribution system where upgrade is required, shall also be upgraded accordingly to meet current code requirements.

13. EES System Modified?

This system is the Essential Electrical System described in CEC 517-25, through CEC 517-50. The EES/branch circuit will not be considered as modified if the scope of construction involves only a simple removal of a load or device. Relocation of an existing load or device, or the addition of a load or device, constitutes a modification of the EES/branch circuit.

A “no” answer leads to the box at the lower portion of the flow chart which delivers the reminder that all new elements of construction must comply with the current code.

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A “yes” answer leads one to block #14.

14. Is EES Panel/Equipment Segregated per Code?

Is the panel to which load is being added segregated per the requirements of CEC 517-25 and 517-30 through CEC 517-50?

A “yes” answer leads to block #16. A “no” answer leads to block #15.

15. Will Load or Circuits Exceed EES Panel/Equipment Capacity?

This is the EES panel to which load is being added. If load capacity verification per OSHPD PIN 3-220 indicates that this panel will be overloaded by the load addition, the panel, its feeder and feeder overcurrent protective device must be brought into conformance with current code requirements. The next panel electrically upstream towards the source must also undergo load capacity verification per the requirements of OSHPD PIN 3-220. If it is also overloaded, it must also be brought into conformance with current code requirements along with its feeder and feeder overcurrent protective device. It is not the intent of this paragraph to relieve the Electrical Engineer from the responsibility of performing load capacity verification calculations on affected feeders all the way back to the main service entrance or to the terminals of a separately derived system as required by Article 220 of the California Electrical Code.

Non-segregated EES panels which are not overloaded do not need to be upgraded. However, new loads added to the panel must be segregated at the branch circuit level. That is, new loads must be connected to an existing or new branch circuit so that all loads on that circuit are either life safety branch loads, critical branch loads, or equipment system loads.

16. Is EES Panel’s/Equipment’s Condition/Location/Listing/Labeling/Load Capacity Adequate?

One arrives at this block with a “yes” answer to the question, “Is existing EES panel/equipment segregated per code?” If the EES panel/equipment which is proposed to be connected to electrical systems within the remodel project’s scope of construction is not in proper working condition, is not located properly per current code requirements, is not adequately listed, labeled or certified per the requirements of OSHPD CAN 3-110-2, or does not have adequate load capacity per PIN 3-220, one is directed to block #17 which requires upgrade of the EES at this level.

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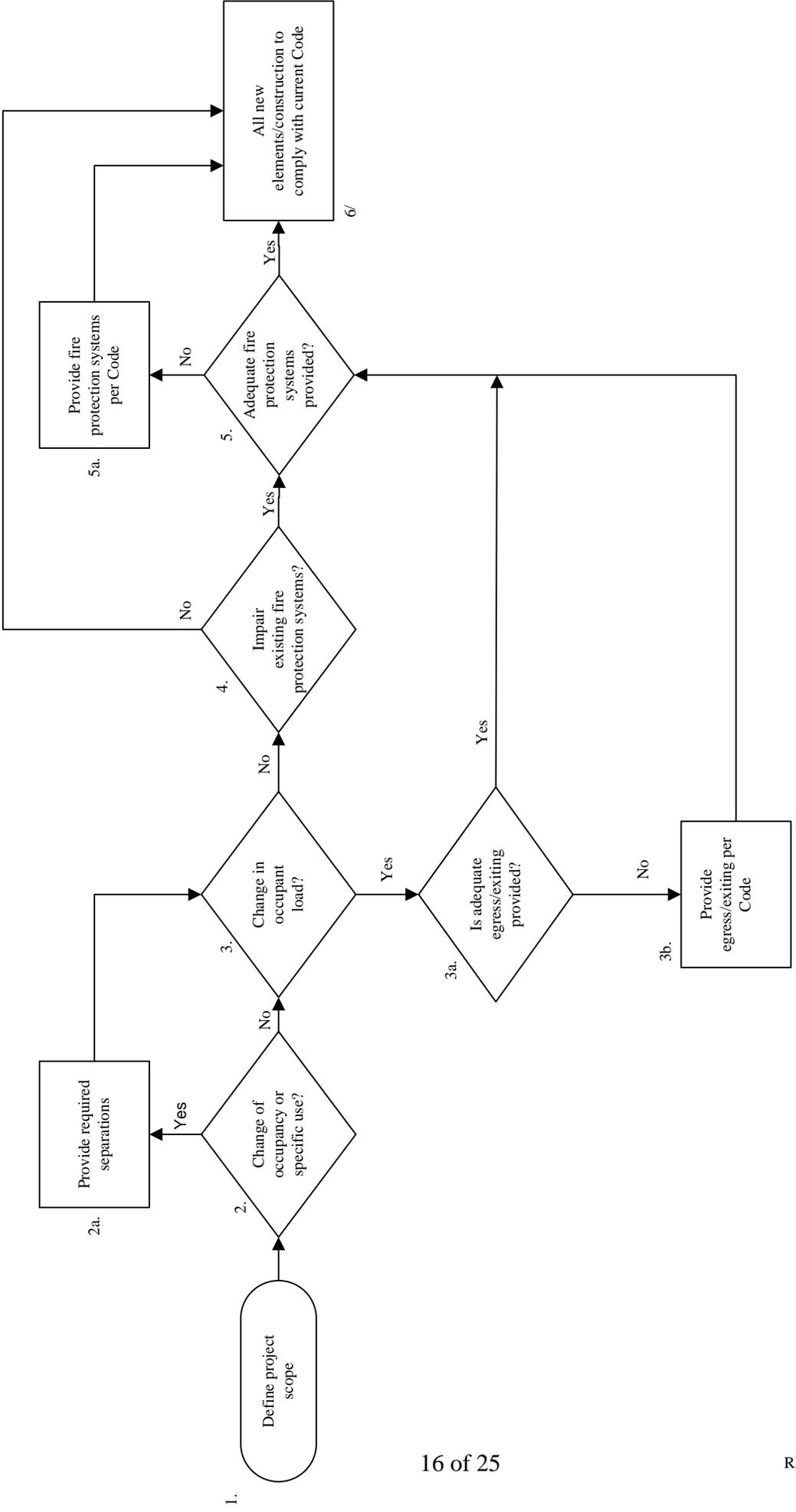
17. Upgrade EES At This Level.

Where an existing segregated or non-segregated EES panel becomes overloaded based on the requirements of OSHPD PIN 3-220, the panel must be replaced with code conforming, segregated panels and panel feeders. If there are life safety branch loads, a life safety branch panel shall be provided with a separate feeder back to the serving panel electrically upstream towards the source. If there are critical branch loads, a critical branch panel shall be provided with a separate feeder back to the serving panel electrically upstream towards the source. If there are equipment system loads, an equipment system panel shall be provided with a separate feeder back to the serving panel electrically upstream towards the source. Existing non-segregated branch circuits not modified within the scope of construction per narrative note #13, will not be required to be segregated. However, non-segregated branch circuits shall not be fed from the life safety branch panel per CEC 517-32. Transformers, transfer switches and other electrical devices which are not panels but which occur at a level in the distribution system where upgrade is required shall also be upgraded to comply with current code requirements.

Where an existing segregated EES panel has adequate load capacity for the proposed new load, but is not in proper working condition, is not located properly per current code requirements, or is not listed, labeled, or certified per OSHPD CAN 3-110-2, it shall be brought into conformance with current code requirements.

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FIRE & LIFE SAFETY REMODEL FLOW CHART



NARRATIVE FOR FIRE AND LIFE SAFETY REMODEL FLOW CHART

This narrative must be used with the Health Facility Remodel Flow Chart for Fire and Life Safety Systems. The numbers shown on the Flow Chart correspond to the numbers shown below. The purpose of this narrative is to elaborate on the terminology used in the Flow Chart and to show the code requirements that OSHPD will enforce.

1. Define Scope

- a. It is the responsibility of the project team with their client to initially assess the needs of the facility in determining the project scope.
- b. In developing project scope consideration should be given to:
 1. The project objectives
 2. Analysis and assumptions of existing conditions
 3. Key code assumptions (Title 24 and Title 22)
 4. Applicable OSHPD CANs and PINs
 5. Identify change of function.

2. Change of occupancy or specific use?

Based upon the scope, it must be determined if a change of occupancy or a change of a specific use will occur as a result of the project. A change of occupancy or a change of specific use is a change in an occupancy or a specific use identified in Chapter 3 or Table 3C of the California Building Code. Section 301, California Building Code

2a. Provide required separations.

Occupancy separations in accordance with Chapter 3 of the California Building Standards Code or an approved alternate means of protection must be provided when separations are required by Section 302.1 or Section 308.8 of the California Building Code. Section 3405, California Building Code

3. Change in occupant load?

Each project must be evaluated for a change in occupant load. A change in occupant load may occur when there is a change of occupancy, use, or an increase in area. Section 1003.2.2, California Building Code

3a. Is adequate egress/exiting provided?

When changes of occupancy, specific use, or change in area occur which create a change in occupant load, it must be determined if adequate egress is provided. Adequate egress is provided when maximum travel distance is not exceeded and the minimum width, number of exits, distance between exits and fire rated separations are provided in accordance with Chapter 10 of the California Building Code or an approved alternate means of protection is provided. Section 3403.2, California Building Code.

Egress cannot be considered as adequate if not in compliance with provisions of current or previous code.

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3b. Provide egress/exiting per Code.

If determined that adequate egress is not provided, egress must be provided in accordance with Chapter 10 of the California Building Code.

4. Impair existing fire protection systems

It must be determined if the project causes or creates a deficiency in the existing fire protection systems including fire dampers, fire/smoke dampers, smoke control, fire sprinkler and fire alarm systems.

5. Adequate fire protection systems provided?

Projects must be evaluated for adequate fire dampers, smoke/fire dampers, and fire protection systems including smoke control, fire sprinkler and fire alarm systems.

See Chapters 3, 7, and 9 of the California Building Code or an approved alternate means of protection.

Fire protection systems are considered to be adequate when they are in compliance with the current California Building Standards Code or are in compliance with the applicable code when they were installed.

5a. Provide fire protection systems per Code.

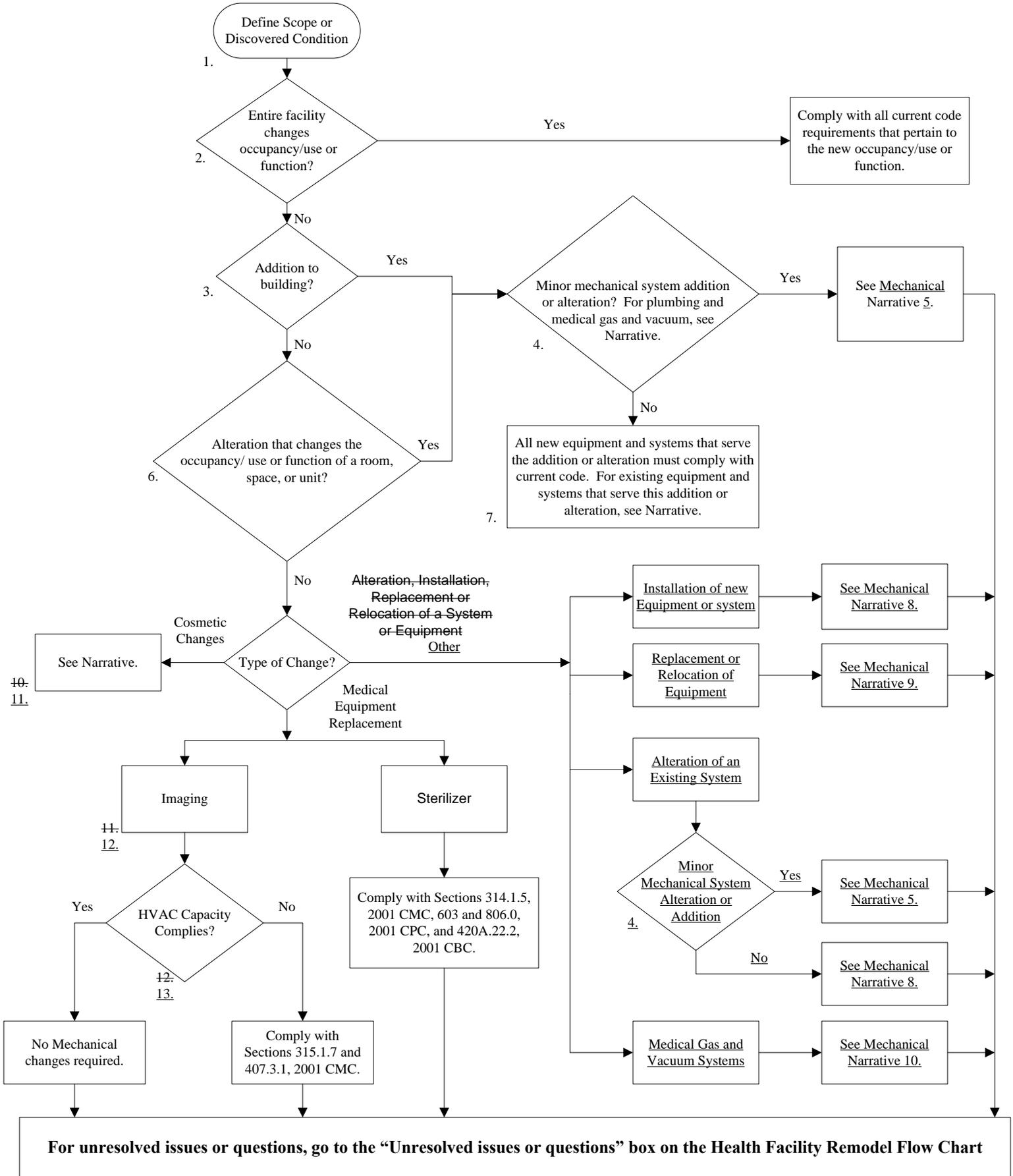
If determined that adequate fire protection systems are not provided, systems must be provided in accordance with the California Building Standards Code or an approved alternate means of protection.

6. All new elements/construction to comply with current Code.

All new construction, elements and systems associated with remodel projects must comply with the California Building Standards Code. Such compliance may include an approved alternate means of protection.

(Additions or changes indicated by underline; deletions by strikeout)

MECHANICAL, PLUMBING, AND MEDICAL GAS AND VACUUM SYSTEMS REMODEL FLOW CHART



**NARRATIVE FOR MECHANICAL, PLUMBING, AND MEDICAL GAS
AND VACUUM SYSTEMS REMODEL FLOW CHART**

This narrative must be used with the Health Facility Remodel Flow Chart for Mechanical, Plumbing, and Medical Gas and Vacuum Systems. The numbers shown on the Flow Chart correspond to the numbers shown below. The purpose of this narrative is to elaborate on the terminology used in the Flow Chart and to show the code requirements that OSHPD will enforce.

At the discretion of OSHPD, the design professional may be requested to submit design calculations or measurements to verify that the existing systems and equipment can achieve code compliance.

Note: See the Fire and Life Safety Flow Chart and Narrative for fire damper, smoke damper, and fire sprinkler system requirements.

1. Define Scope.

- a. It is the responsibility of the project team with their client to initially assess the needs of the facility in determining the project scope.
- b. In developing project scope consideration should be given to:
 1. The project objectives
 2. Verification and analysis of existing conditions
 3. Key code assumptions (Title 24 and Title 22)
 4. Applicable OSHPD CANs and PINs
 5. Identify change of function. Specific functions are identified in Chapter 4A, 2001 CBC. Identify rooms with CMC Table 4-A nomenclature.

2. The following are examples of an entire facility changing function:

- a. Acute care hospital changes to a skilled nursing facility.
- b. Skilled nursing facility changes to an acute care hospital.
- c. Skilled nursing facility changes to an intermediate care facility.

3. For definition of building “addition” see definition in Section 202 California Building Code.

4. OSHPD will use the following criteria as guidelines for deciding if an addition or alteration to an existing mechanical system will be considered as minor:

- a. The project does not involve a room or area shown in Table 315, California Mechanical Code (CMC).
- b. The project does not involve a Cardiac Catheterization Lab, Cystoscopy, Angiography, emergency operating room, Positive Pressure Isolation Room, or a Negative Pressure Isolation Room.
- c. The building addition or altered space does not contain more than 2000 cfm of supply, return, or exhaust air.

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- d. The project does not use more than 10% of the connected existing mechanical system capacity. Mechanical systems include air handling and distribution systems, hot water systems, chilled water systems, steam, etc. If existing mechanical systems are used to serve the building addition, the addition must not cause the capacity of the existing systems to be exceeded.
- e. The project involves only balancing of air or water systems.

The design professional should communicate with OSHPD for determining if an addition or alteration to an existing mechanical system will be considered as minor in accordance with the above guidelines.

The 2001 California Plumbing Code (CPC) does not have a section for **minor** additions or alterations to plumbing systems. Additions or alterations may be made to any plumbing system without requiring the existing plumbing system to comply with all the requirements of the California Plumbing Code, provided the addition or alteration conforms to that required for a new plumbing system. Additions or alterations must not cause an existing system to become unsafe, insanitary or overloaded. See Section 101.5.1, 2001 CPC.

The 1999 edition of NFPA 99 does not have a section for **minor** additions or alterations to medical gas and vacuum systems. See item ~~9~~ 10 of this narrative.

5. **Minor additions or alterations** to existing **mechanical** systems may be installed in accordance with the code in effect at the time the original installation was made. The design professional is responsible for giving OSHPD sufficient information to decide if the original installation complies with the code in effect at the time of the installation. If existing mechanical systems are used to serve the building addition, the addition must not cause the capacity of the existing systems to be exceeded. Measures must be taken to assure that the modifications within the project boundaries do not impact airflow to spaces outside the project boundaries. Plans must contain specific information and procedures to define the measures required.
6. **For definition of “alteration”** see definition in Section 202 California Building Standards Code. Specific functions are identified in Chapter 4A, 2001 CBC. Identify rooms with CMC Table 4-A nomenclature.
7. **All existing mechanical and plumbing equipment and systems** located within the scope of the project must comply with all current code requirements. For existing equipment or systems that serve the addition or alteration and are not located within the project boundaries, OSHPD will enforce the following code requirements:
 - a. Air-Handling Units, Fan Coil Units, Forced-Air-Type Central Furnaces and exhaust fans.
 1. Filter efficiency, filter location, and filter gages. Section 408, CMC.
 2. Pressure relationship and ventilation requirements for areas within the project boundaries. Section 407.3.1, CMC. Measures must be taken to assure that the modifications within the project boundaries do not impact airflow to spaces outside the project boundaries. Plans must contain specific information and procedures to define the measures required.

(Additions or changes indicated by underline; deletions by strikeout)

3. Emergency electrical power for equipment serving areas or rooms in Table 315, CMC when required by Section 316, CMC.
 4. Indoor temperature and humidity requirements, Section 315, CMC.
 5. Automatic shutoff for smoke control. Section 609, CMC.
 6. Use of corridor or space above ceiling as a plenum. Sections 407.4.1.3 and 407.4.1.4, CMC.
 - b. All other types of existing mechanical, plumbing, and medical gas and vacuum equipment and systems.
 1. If the existing equipment or system has sufficient capacity to serve the addition or alteration, OSHPD will allow the equipment or system to remain as installed. Equipment or systems that do not have sufficient capacity must be replaced or supplemented.
 - c. See item ~~9~~ 10 for additional medical gas and vacuum system requirements.
 - d. All services/systems and utilities serving building additions shall comply with CBC 420A.4.0.
- 8. For alterations to existing mechanical or plumbing equipment or systems, or the installation of new equipment, fixtures, or systems, OSHPD will require the alterations or installation to comply with current code within the project boundary. Mechanical alterations must not cause an existing system to become unsafe or create unhealthy or overloaded conditions. Measures must be taken to assure that the modifications within the project boundaries do not impact airflow to spaces outside the project boundaries. Plans must contain specific information and procedures to define the measures required. Plumbing alterations must not cause an existing system to become unsafe, insanitary or overloaded.**
- 9. For the replacement or relocation of mechanical or plumbing systems or equipment, OSHPD will enforce the following code requirements:**
- a. Air-Handling Units, Fan Coil Units, and Forced-Air-Type Central Furnaces.
 - 1a. Filter efficiency, filter location, and filter gages. Section 408.0, CMC. (OSHPD 1, 3 and 4)
 - 1b. Filter efficiency, filter location, and filter gages. Section 408.0, CMC, except where two filter banks are required in Table 4-C, filter bank No. 1 (30% filter) shall be optional. (OSHPD 2)
 2. Condensate drain. Section 310, CMC; and Chapter 8, CPC.
 3. Clearances and access. Sections 304 and 305, CMC.
 4. Emergency electrical power. Section 316, CMC (OSHPD 1 and 4 only).
 5. Outdoor air intake location. Sections 407.2, 414, and 906.6, CMC; and Section 906.2, CPC.
 6. Indoor temperature and humidity requirements. Section 315, CMC.
 7. Automatic shutoff for smoke control. Section 609, CMC.
 8. Air Balance. Comply with Narrative ~~13~~ 14.
 9. Outdoor air changes and total air changes. Table 4-A, CMC.
 10. Fan operation. Section 407.1.1, CMC.
 11. Use of corridor or space above ceiling as a plenum. Sections 407.4.1.3 and 407.4.1.4, CMC.

(Additions or changes indicated by underline; deletions by strikeout)

- b. Steam and Hot Water Boilers.
 - 1. All requirements in Chapter 10, CMC.
 - 2. Room size. Section 304, CMC.
 - 3. Number of boilers. Section 314, CMC.
 - 4. Emergency electrical power. Section 316, CMC.
 - 5. Section 1007.7, CBC.
 - 6. Temperature requirements. Section 314, CMC.
 - 7. Combustion air requirements. Chapter 7, CMC.
- c. Refrigeration Systems.
 - 1. All requirements in Chapter 11, CMC.
- d. Exhaust Fans.
 - 1. Exhaust fan location. Section 407.1.2, CMC.
 - 2. Exhaust fan operation. Section 407.1.1, CMC.
 - 3. All requirements in Chapter 5, CMC.
 - 4. Emergency electrical power. Section 316, CMC.
 - 5. Exhaust discharge. Minimum 25' clearance from outside air intakes. Section 407.2.1 CMC.
 - 6. Air balance. Comply with Narrative ~~13~~ 14.
- e. Evaporative Coolers.
 - 1. All requirements in Section 403-405, CMC.
- f. Plumbing Fixture.
 - 1. All requirements in Table 4-2, CPC.
 - 2. Shower and bathtub valves. Section 420.0, CPC.
 - 3. All requirements in Chapter 4, CPC.
 - 4. Sections 311, and 316.2, CPC.
 - 5. Sterilization. Section 609.9 CPC.
- g. Water Heater.
 - 1. All requirements in Chapter 5, 2001 CPC.
 - 2. All requirements in Sections 612.1, 612.2, 612.4, and 612.5, 2001 CPC.
- h. Fuel Storage Tanks.
 - 1. Comply with Policy Intent Notice (PIN) 2.

9. 10. For the replacement, relocation or alteration to medical gas or vacuum systems or equipment, OSHPD will enforce the code requirements shown below. The cited code sections are from the 1999 edition of NFPA 99.

- a. For alterations of existing systems, OSHPD will require all new work within the project boundaries to comply with NFPA 99. The existing systems may have their use continued, if the systems do not present a distinct hazard to life. See Sections 4-1 and 1-2, NFPA 99 and the corresponding Sections in the "Health Facilities Handbook," Fourth Edition, published by the National Fire Protection Association. Testing of systems, including existing systems breached by project work, must comply with Section 4-3.4, 1999 NFPA 99.
- b. **Medical Air Compressor Replacement.** Comply with NFPA 99, Figure 4-3.1.1.9 and applicable code sections.
- c. **Medical Vacuum Pump Replacement.** Comply with NFPA 99, Figure 4-3.2.1.10 and applicable code sections.

(Additions or changes indicated by underline; deletions by strikeout)

- d. **Medical Gas Cylinder Manifold/Controls Replacement.** Comply with NFPA 99, Figure 4-3.1.1.5 or 4-3.1.1.6 and applicable code sections.
- e. **Bulk Medical Gas System Alteration or Replacement.** Comply with NFPA 99, Figure 4-3.1.1.7 and applicable code sections; and 1996 edition of NFPA 50.
- f. **Medical Gas Cylinder Storage Alteration.** Comply with Section 410, 2001 CBC; and Section 7404, 2001 California Fire Code.

~~10~~ **11. Cosmetic Change.** A cosmetic change is a superficial or decorative change to a room. A cosmetic change must not change the function, area, or volume of the room. Examples of cosmetic changes are: replacement and/or relocation of diffusers, registers, or grilles; painting; new wall coverings; new floor finishes; and similar work.

The FREER Manual contains requirements for most projects considered cosmetic changes. For cosmetic changes that are not in the FREER Manual contact OSHPD mechanical staff. For cosmetic changes that involve the replacement of diffusers, or grilles, the room must comply with Section 407.3.1, 2001 CMC.

~~11~~ **12. Examples of imaging equipment are:** X-ray equipment, Gamma Camera, CT Scanner, and MRI.

~~12~~ **13. The design professional must provide** sufficient information to OSHPD to show the existing HVAC system can maintain the proper room temperature required by Section 315.1.7, CMC. OSHPD recommends the design architect or engineer determine that the HVAC system is capable of maintaining the room environmental conditions within the parameters recommended by the imaging equipment manufacturer. The final air balance in the space must comply with CMC 407.3.1. Where changes in airflow are necessary, measures must be taken to assure that the modifications within the project boundaries do not impact airflow to spaces outside the project boundaries. Plans must contain specific information and procedures to define the measures required.

~~13~~ **14. Air Balance.** For projects involving the replacement of a supply, return or exhaust fan, the air distribution system shall be rebalanced in accordance with the following requirements:

- a. For acute care hospitals (OSHPD 1). The supply, return and exhaust airflows in the entire area served by the replaced unit shall be rebalanced to comply with CMC Table 4-A. Rebalancing shall not be required for fans serving entirely non-patient care areas.
- b. For skilled nursing facilities, licensed clinics and correctional treatment centers (OSHPD 2, 3 and 4). Rebalancing the air distribution systems is not required if:
 - 1. There is no change to the system design airflow.
 - 2. There is no change to the air distribution system.
 - 3. The replaced fan system does not serve an operating room, cardiac cath lab, intensive care area, recovery room, nursery, negative pressure isolation room or a positive pressure isolation room.If any of these conditions are not met, then the entire air distribution system shall be rebalanced as described in Item ~~13a.~~ 14a above.
- c. General requirements: When rebalancing is required, the entire area served by the supply, return or exhaust fan(s) being replaced shall be rebalanced. Mechanical plans

(Additions or changes indicated by underline; deletions by strikeout)

shall contain all necessary information to demonstrate design airflows in areas served by the equipment will comply with the ventilation and air balance requirements in CMC Table 4-A. Plans shall include room name and number, and room volume of each room served by the unit. If the actual room name does not match an area designation in CMC Table 4-A, then an equivalent CMC Table 4-A room designation based upon the functional use of the space shall be provided on the plans. Adjacent rooms or spaces not served from the replaced unit that have their airflow or air balance impacted must also comply with Table 4-A for both ventilation and air balance.

(Additions or changes indicated by underline; deletions by strikeout)

FILE NO. 2-308.1

DATE: February 2, 2001

CODE APPLICATION NOTICE

CODE SECTION: CBC 308.1 – Group I Occupancies Defined and Fire and Life Safety Requirements related to Group I, Division 1.1 and Group I, Division 3 Occupancies

308.1 Group I Occupancies Defined. Group I Occupancies shall be:

Division 1.1. Nurseries for the full-time care of children under the age of six (each accommodating more than five children), *[for SFM] six children*).

Hospitals, sanitariums, nursing homes with nonambulatory patients *[for SFM] where medical care is provided, or homes with nonambulatory guests where medical care is provided*, and similar buildings (each accommodating more than five patients *[for SFM] six patients*).

...

...

Division 3. Mental hospitals, mental sanitariums, jails, prisons, reformatories and buildings where personal liberties of inmates are similarly restrained. *[For SFM] Restraint shall not be permitted in any building except in Group I, Division 3 Occupancies constructed for such use in accordance with the provisions of this chapter.*

...

INTERPRETATION:

The following provisions shall apply to Occupancies housing nonambulatory patients under a condition of restraint when located in portions or areas of acute care hospitals or skilled nursing facilities classified as Group I, Division 1.1 Occupancies.

1. General

- a. The determination whether patients are ambulatory or nonambulatory, including those housed under a condition of restraint, shall be made by Licensing and Certification.
- b. These provisions shall not apply to local detention facilities, jail wards, correctional treatment centers (CTC's), juvenile halls, camps, jails and lockups used for the detention of minors, prisons or Group I, Division 3 Occupancies classified as places of detention.
- c. Requirements which are the same for both Group I, Division 1.1 and Group I, Division 3 Occupancies require no clarification.
- d. Unless otherwise noted, sections cited are from the ~~1998~~ 2001 California Building Code.
- e. Facilities or portions of facilities converting from unlocked to locked or from locked to unlocked will be considered a change of occupancy or use for the purposes of Section 3405 and CAN 2-34.

2. Construction, height and allowable area shall comply with Sections 308.2.2.2 and the Group I, Division 3 Occupancy provisions of Table 5-B.
3.
 - a. Smoke barriers shall comply with Section 308.2.2.1.
 - b. Openings in smoke barriers shall comply with the Group I, Division 1.1 Occupancy provisions of Section 905.2.4.
4. Special hazard provisions, including those regulating specific use areas shall comply with Group I, Division 1.1 provisions of Section 308.8 and Table 3-C.
5. Fire alarms shall comply with Group I, Division 1.1 provisions of Sections 308.9 and ~~308.10a~~ 308.10.1 and California Fire Code Section ~~4007.2.7.1~~ 1006.2.7.1, and with the provisions of California Fire Code Section ~~4007.2.7.2~~ 1006.2.7.2.
6. Fire sprinklers shall comply with Group I, Division 1.1 provisions of Sections 904.2.7 and 904.3.1 Item #1.
7. Interior finish ratings shall comply with the provisions of Table 8-B as follows:
 - a. Group I, Division 1.1 for “enclosed vertical exitways” and “other exitways.”
 - b. Group I, Division 3 for “rooms or areas.”
8. Means of egress illumination shall comply with Group I, Division 1.1 provisions of Section 1003.2.9.
9. Means of egress shall comply with Group I, Division 1.1 provisions of Section 1007.5.
10. When lobby means of egress doors are locked, Exception 2 of Section 1005.3.3.3 shall not apply.
11. Means of egress shall not be secured without effective provisions being made to remove occupants in case of fire or other emergency. Sections 1003.3.1.8 and 1007.5.12
12. Roof covering shall comply with the Group I, Division 1.1 Occupancy provisions of Table 15-A.

REASON:

Requirements pertaining to Group I, Division 1.1 Occupancies regulate hospitals and nursing homes. Requirements pertaining to Group I, Division 3 Occupancies regulate mental hospitals and other buildings where personal liberties of patients are restrained. Because the requirements contained in the building and Fire Codes do not address portions or areas of Group I Occupancies where both nonambulatory and restrained patients are housed, it is unclear whether the requirements for Group I, Division 1.1 or Group I, Division 3 occupancies apply to buildings or areas housing

both nonambulatory and restrained patients. This has resulted in the inconsistent application of Building and Fire Code requirements in these types of facilities.

This Code Application Notice serves to clarify the application of requirements when these conditions exist.

ORIGINAL SIGNED	8/25/04
Kurt A. Schaefer	Date

FILE NO. 2-413A.1

DATE: March 20, 2001

CODE APPLICATION NOTICE

CODE SECTION: Sections 413A.1 and 101.7, ~~1998~~ 2001 California Building Code
Section ~~1-2.2~~ 1-3, NFPA-37, ~~1994~~ 1998 Edition

1998 2001 California Building Code

413A.1 General. *The installation of combustion engines and gas turbines shall be in accordance with NFPA-37, Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines, 1994 Edition and this chapter.*

NFPA 37, ~~1994~~ 1998 Edition

~~1-2.2~~ 1-3 Engines used in essential electrical systems in health care facilities shall comply with this standard and any special provisions contained in NFPA-99, Standard for Health Care Facilities.

1998 2001 California Building Code

101.7 Standard Reference Documents. *The codes, standards, and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code.*

When this code does not specifically cover any subject relating to building design and construction, recognized fire-prevention engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Protection Association may be used as authoritative guides in determining recognized fire-prevention practices.

INTERPRETATION:

For engines used in essential electrical systems in health care facilities, the following special provisions of NFPA 99, ~~1996~~ 1999 Edition shall be enforced by the Office:

- (a) Section 3-4.1.1.8 Load Pickup
- (b) Section 3-4.1.1.9 Maintenance of Temperature
- (c) Section 3-4.1.1.10 Ventilating Air
- (d) Section 3-4.1.1.11 Cranking Batteries
- (e) Section 3-4.1.1.14 Requirements for Safety Devices
- (f) Section 3-4.1.1.15 Alarm Annunciator

In addition, the following requirements of the ~~1996~~ 1999 NFPA 110 Standard for Emergency and Standby Power Systems will be applied.

- (a) Section 3-3.1 Heated enclosure or battery heater for outside locations.
- (b) Section 3-4.2.1 Fuel supply
- (c) Section 3-5 Rotating equipment (Option: Safety devices may comply with either ~~1996~~ 1999 NFPA-99 Section 3-4.1.1.14 or Sections 3-5.5 and 3-5.6)
- (d) Section 5-2.4 Location, clearances
- (e) Section 5-8 EPS cooling system
- (f) Sections 5-9.2, 5-9.3 and 5-9.4 Fuel system (see Note below)
- (g) Section 5-10.4 Exhaust system backpressure
- (h) Section 5-12 Distribution (excluding 5-12.4(a))

Note: The minimum required fuel supply for generator sets shall comply with CEC 700-12(b)(2) Exceptions 1-3.

For additional requirements related to combustion engines and gas turbines, refer to CANs 2-413A.2.3 and 3-700-4(a).

REASON:

The code does not specifically state which special provisions of NFPA 99 shall be enforced for essential electrical systems. In addition, appropriate sections from NFPA 110, ~~1996~~ 1999 edition, are enforced when current code or NFPA 99 does not specifically cover a subject relating to on-site generator sets.

<u>ORIGINAL SIGNED</u>	<u>9/21/04</u>
Kurt A. Schaefer	Date

FILE NO. 2-413A.2.3

DATE: December 8, 1994

CODE APPLICATION NOTICE

CODE SECTION: Section 413A.2.3, ~~1998~~ 2001 California Building Code

413A.2.3 Location. Combustion engines and gas turbines used for emergency power shall not be located in a room or area used for any purpose other than equipment and controls related to the generation and distribution of emergency power.

INTERPRETATION:

This notice addresses the equipment allowed in rooms where a combustion engine or gas turbines used for emergency power are installed. It is intended to apply to combustion engines or gas turbines located inside buildings only. These requirements do not apply to such equipment located outside of buildings.

Only equipment essential to the operation of the engine/generator may be located in these rooms. This equipment would include, but is not limited to, paralleling gear, generator monitoring equipment, etc. Equipment which shall be specifically excluded from the room would include the automatic transfer switch, normal system distribution equipment and any other equipment not essential for the operation of the engine/generator.

For Additional requirements related to combustion engines and gas turbines, refer to CANs 2-413A.1 and 3-700-4(a).

REASON:

This Code Application Notice is necessary to clarify the statement " ... area used for any other purpose." The purpose of the section is to restrict the type and amount of equipment allowed in the area. Specifically, if transfer switches were allowed in the area, a fire/explosion in the area could disable both the emergency and normal sources of power to the essential loads.

ORIGINAL SIGNED

8/25/04

Kurt A. Schaefer

Date

REVISION: August 18, 2004

CODE APPLICATION NOTICE

CODE SECTION: 420A.7 Windows and Screens, 2001 California Building Code

420A.7 Windows and Screens.

420A.7.1 Rooms approved for the housing of patients shall be provided with natural light by means of exterior glazed openings excluding clerestory window, obscure glass and skylights, with an area not less than one tenth of the total floor area and natural ventilation by means of an exterior opening, with an area not less than one-twentieth of the total floor area.

EXCEPTIONS: 1. Intensive-care newborn nurseries.

2. Intensive-care units other than intensive-care nurseries shall be provided with exterior glazed openings, excluding obscure glass, sized and located in a manner to provide patients with an awareness of the outdoors.

420A.7.2 Patient room window openings shall be operable and shall have sills not more than 36 inches (914 mm) above the floor. Where windows require the use of tools or keys for operation, the tools or keys shall be located at the nurses' station.

EXCEPTIONS: 1. Window sills in intensive-care units may be 60 inches (1524 mm) above the floor.

2. Windows in buildings which have a mechanical smoke-control system complying with Section 905 need not be operable.

3. Windows of isolation rooms shall only be operable by the use of tools or keys which shall be located at the nurses' station.

INTERPRETATION:

Patient rooms that comply with the current code requirements for mechanical ventilation systems, smoke barriers and other passive smoke control systems shall be deemed to comply with the intent of the code for providing fresh air to occupants in emergencies and venting the products of combustion. OSHPD will consider designs for patient rooms with inoperable windows, that otherwise comply with applicable code requirements, as providing an acceptable alternate method of compliance.

REASON:

Hospitals and skilled nursing facilities are required to comply with the *Life Safety Code (LSC)* in order to qualify for federal reimbursement. Until recently, the Centers for Medicare and Medicaid Services (CMS) required compliance with the 1985 *LSC*. The 1985 *LSC* required operable windows in patient sleeping rooms of health care occupancies to provide fresh air for occupants in emergencies and venting of products of combustion, unless an engineered smoke control system was provided.

In the decades since the 1985 *LSC* was written, the codes have been modified to incorporate life safety features that provide these protections without the need for operable windows. The *LSC* acknowledged this by dropping the requirement for operable windows. In January 2003, CMS adopted the 2000 *LSC*, which no longer requires operable windows. Additionally, operable windows in patient rooms can cause security concerns, air balance difficulties, and environmental air quality issues.

OSHPD has submitted a code change proposal for the 2004 annual cycle to eliminate the CBC requirement for operable windows, based on the change in the *LSC*. The current California Building Standards Code, Title 24, requires mechanical ventilation for hospitals and skilled nursing facilities, and also requires these facilities to be compartmentalized and provide other passive and active smoke control systems to protect occupants from the spread of smoke. There is no justification to continue requiring operable windows for hospitals and skilled nursing facilities in the California code, since the *LSC* no longer requires them, and other reasons for requiring operable windows in the past have been addressed by other means.

ORIGINAL SIGNED

2/17/05

Kurt A. Schaefer

Date

FILE NO. 2-420A.31

DATE: May 31, 1996

CODE APPLICATION NOTICE

CODE SECTION: Section 420A.31, ~~1995~~ 2001 California Building Code, Part 2, Title 24

Cardiovascular Surgery and/or Catheterization Laboratory Service Spaces. *A catheterization laboratory space shall be provided and shall include a minimum floor area of 420 square feet (39 m²) for the procedure room in addition to spaces for control, monitoring and recording equipment, and X-ray power and controls, and a minimum of one scrub sink for each catheterization laboratory*

Cardiovascular surgery space, in addition to any spaces required under Section 420A.15, shall include the following:

- 1. Operating rooms with a minimum floor area of 550 square feet (51.1 m²) with a minimum dimension of 20 feet (6096 mm).*
- 2. A pump work room*

INTERPRETATION:

The cardiovascular operating room shall contain not less than 550 square feet (51.1 m²) of useable floor area exclusive of any fixed cabinets and casework.

REASON:

The interpretation clarifies the minimum floor area required for a cardiovascular surgery operating room should be clear of fixed items that may reduce the ease of movement by hospital staff. This interpretation is consistent with language in Section 420A.15.2, ~~1995~~ 2001 California Building Code, regarding size of operating rooms and with Section 7.7.A2 of the ~~1992-93~~ 2001 "Guidelines for Construction and Equipment of Hospital and Medical Facilities" compiled by the American Institute of Architects.

NOTE: Section 70439, Title 22, California Code of Regulations licensing requirements state that the minimum floor area of the cardiovascular surgical operating room shall be 650 square feet (60 m²) in addition to work room, pump work room and adequate storeroom space. When designed to the minimum requirements of the California Building Code (550 square feet), it will be necessary to submit for program flexibility in order to meet licensure requirements.

ORIGINAL SIGNED

8/25/04

Kurt A. Schaefer

Date

REVISION: August 18, 2004

FILE NO. 2-423A.1

DATE: August 20, 1996

CODE APPLICATION NOTICE**CONNECTION TO PATIENT MEDICAL GAS SYSTEMS**

CODE SECTION: Section 423A.1, CBC, and Section 4-3.1.1.9(a) and A-4-3.1.1.9(a) and A-4-6.1.2.1, Appendix A, 1996 1999 NFPA 99

423A.1 Gas and Vacuum Systems. The design, installation and testing of medical gas and vacuum systems shall be in accordance with NFPA 99 – 1996 1999, Standard for Health Care Facilities.

4-3.1.1.9(a) General. ~~The first sentence of 4-3.1.1.9(a) “The medical air compressor shall take its source from the outside atmosphere and shall not add contaminants in the form of particulate matters, odor, or other gases.” applies to both the distribution of the air in the piping system and to the use of a compressor as a source. It shall be connected only to the medical air piping distribution system and shall not be used for any other purpose.~~

A-4.3.1.1.9(a) It is the intent that the medical air piping distribution system support only the intended need for breathable air for such items as IPPB and long-term respiratory assistance needs, anesthesia machines, ~~etc.~~ and so forth. The system is not intended to be used to provide engineering, maintenance, and equipment needs for general hospital support use. It is the intent that the life safety nature of the medical air be protected by a system dedicated solely for its specific use. The medical air distribution system could also supply air-driven instruments that exhaust into the pharynx. This might be a dental or other surgical device.

As a compressed air supply source, a medical air compressor should not be used to supply air for other purposes because such use could increase service interruptions, reduce service life, and introduce additional opportunities for contamination.

A-4-6.1.2.1 Piping Systems. Piping systems supplying medical gases to patients should be reserved exclusively for that purpose so as to protect the patients from administration of gas other than that intended for their use. Therefore laboratory gas piping systems should not be used to pipe gas for use by hospital patients. This warning is also intended to apply to piping systems intended to supply gas to patients within a laboratory facility. Such a system should not be used to supply laboratory equipment other than that directly involved with the patient procedure.

INTERPRETATION:

Application: Hospitals, Skilled Nursing Facilities (SNF) and Intermediate Care Facilities (ICF)

~~Piping systems supplying medical compressed air and medical gases to patients shall be reserved exclusively for patient use.~~

~~OSHPD will allow connection of these piping systems to outlets in areas used for testing and maintenance of patient devices which operate using such gases. These patient devices include but are not limited to ventilators and anesthesia machines.~~

The intent of NFPA 99, Section 4-3.1.1.9(a) is to avoid contamination of the medical compressed air system used for patient care by keeping it separate from other uses such as engineering, maintenance and equipment. The testing of patient medical devices that operate using medical compressed air must also be performed using the same medical compressed air system, in order to avoid contamination of the equipment used directly for patient care.

OSHDP will allow connection of these piping systems to outlets in areas used for testing and maintenance of patient devices that operate using such gases. These patient devices include but are not limited to ventilators and anesthesia machines.

REASON:

OSHDP views testing of patient devices requiring medical grade gases as a patient use. Therefore connection to these piping systems is consistent with NFPA 99.

ORIGINAL SIGNED	9/21/04
Kurt A. Schaefer	Date

FILE NO. CAN 2-1003.2.9

DATE: March 1, 2001

CODE APPLICATION NOTICE

CODE SECTION: 1003.2.9 Means of Egress Illumination, ~~1998~~ 2001 California Building Code

1003.2.9 Means of egress illumination.

1003.2.9.1 General. Any time a building [for SFM] or portion of a building is occupied, the means of egress serving the occupied portion shall be illuminated at an intensity of not less than 1 footcandle (10.76 lx) at the floor level.

EXCEPTIONS: 1. In Group R, Divisions 2.1.1, 2.2.1, 2.3.1, 6.1.1, 6.2.1 and 3 Occupancies and within individual units of Group R, Division 1 Occupancies.

2. In auditoriums, theaters, concert or opera halls, and similar assembly uses, the illumination at the floor level may be reduced during performances to not less than 0.2 footcandle (2.15 lx), provided that the required illumination be automatically restored upon activation of a premise's fire alarm system when such system is provided.

3. [for SFM] Sleeping rooms in Group I Occupancies, and sleeping rooms in Group R, Divisions 2.1, 2.2, 2.3, 6.1 and 6.2 Occupancies.

1003.2.9.2 Power Supply. The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of its failure, illumination shall be automatically provided from an emergency system for Group I, Divisions 1.1 and 1.2, [*for SFM*] occupancies in rooms or areas requiring two or more exits or exit access doorways, or a combination thereof, and Group R, Divisions 2.1 and 2.2 Occupancies and for all other occupancies where the means of egress system serves an occupant load of 100 or more. Such emergency systems shall be installed in accordance with the Electrical Code.

For high-rise buildings, see Section 403.

INTERPRETATION:

In accordance with ~~1998~~ 2001 CBC, Section 104.2.8, the Office will accept designs for approval which conform to the illumination requirements as stated below as an alternate design conforming to the code.

- A. In office areas and similar spaces that are occupied only during specific hours of operation, egress lighting may be may be switched in those portions of the building which are separate and occupied only during "business hours."

Emergency power on the life safety branch is required for egress illumination in these areas only when the egress system serves an occupant load of 100 or more.

- B. For hospitals, where task lighting is provided in accordance with the requirements of the California Electrical Code, task lighting on the critical branch of the emergency system may be accepted as an alternate to egress illumination.

Item B does not apply to skilled nursing facilities, which must comply with the egress illumination requirements of the ~~1998~~ 2001 CBC and the ~~1998~~ 2001 California Electrical Code (CEC) for areas other than those addressed in items A and C.

- C. In hospitals and skilled nursing facilities, OSHPD will continue to allow the omission of egress illumination in sleeping rooms, similar to the requirements of the 1995 CBC Section 1012.1.

REASON:

Section 1003.2.9 of the ~~1998~~ 2001 California Building Code (CBC) requires the means of egress to be illuminated any time the building is occupied. The CBC and the California Electrical Code (CEC) sections 517-32 and 517-42 also requires power for egress lighting in Group I, Division 1.1 and 1.2 Occupancies to be provided by the life safety branch of an emergency system. This would require virtually all areas of hospitals and skilled nursing facilities, including offices, treatment rooms and patient sleeping rooms, to be illuminated 24 hours a day, and that this lighting be powered by the emergency generator. This level of egress lighting is frequently not necessary in hospitals and skilled nursing facilities for the following reasons.

Portions of these facilities, such as administrative office areas or outpatient clinic areas, are occupied only during certain times of day. Egress illumination is not needed for portions of the building that are not occupied. The 1998 *Handbook to the Uniform Building Code* makes it clear that “the code intends that illumination be provided for those portions of the egress system that serve the parts of the building that are, in fact, occupied.” Illumination may be switched in those portions of the building which are separate and occupied only during “business hours.”

The Electrical Code section 517-33(a) requires task lighting powered by the emergency system in many areas of hospitals, making the requirement for egress illumination powered by the emergency system redundant. This is not true for skilled nursing facilities, since the emergency system that powers task lighting in skilled nursing facilities does not meet the minimum requirements for egress lighting (CEC Sections 517-41(d), 517-42, 517-43).

It is inappropriate to require unswitched egress illumination in sleeping rooms. The 1998 *Handbook to the Uniform Building Code* indicates that the change to the wording of 1997 UBC Section 1003.2 was not intended to require lights that cannot be turned off, in sleeping rooms, such as patient sleeping rooms in hospitals, jail cells or dormitory-type rooms. The handbook states that while “the 1997 UBC does not specifically address these types of sleeping rooms, it would not seem reasonable to prohibit the lights from being turned off in a location where people are trying to sleep.” This is consistent with the 1995 *California Building Code* and the 2000 *International Building Code*.

ORIGINAL SIGNED

8/25/04

Kurt A. Schaefer

Date

FILE NO. 2-1109B.3

DATE: September 27, 2000

CODE APPLICATION NOTICE**CODE SECTION:** Section 1109B.3, 1998 2001 California Building Code

1109B.3 Patient Bedrooms and Toilet Rooms. *Patient bedrooms and associated toilet facilities shall be made accessible as follows:*

1. *Long-term-care facilities, including skilled nursing facilities, intermediate care facilities, bed and care, and nursing homes shall have at least 50 percent of patient bedrooms and toilet rooms, and all public-use and common-use areas, accessible.*
2. *General-purpose hospitals, psychiatric facilities, and detoxification facilities shall have at least 10 percent of patient bedrooms and toilets, and all public-use and common use areas, accessible.*
3. *Hospitals and rehabilitation facilities that specialize in treating conditions that affect mobility, or units within either that specialize in treating conditions that affect mobility, shall have all patient bedrooms and toilets and all public-use and common-use areas accessible.*

INTERPRETATION:

The specific applications for accessibility for Group I Occupancies (hospitals, skilled nursing and intermediate-care facilities) are found in Sections 1109B.1 through 1109B.8. Section 1109B.3, subsections 1 through 3, state that ~~the total number~~ at least 50 percent of patient bedrooms and associated toilet rooms ~~that must be accessible~~ for long-term-care (skilled nursing and intermediate care) facilities must be accessible, are 50 percent, at least 10 percent of patient bedrooms and associated toilet rooms for general-purpose hospital (acute care) facilities must be accessible, and ~~rehabilitation facilities must have~~ 100 percent accessible of patient bedrooms and associated toilet rooms for rehabilitation facilities must be accessible. Specificity is also given in the various sections of 1109B pertaining to requirements for the facility entrance, diagnostic and treatment areas, waiting areas, offices and sanitary facilities, offices and suites, and all public-use and common-use areas. The requirements found in Section 1114B.1 are to be applied to all of these areas.

Additionally, since the special requirements of Section 1114B.1 are to be applied to areas where accessibility is required they need not be applied to those patient bedrooms and associated toilet rooms beyond the percentage of rooms required in Section 1109B.3.

REASON:

The general accessibility requirements usually apply throughout a facility, and are found in CCR Title 24, Part 2, Chapter 11B (California Building Code), Section 1103B.1.

Occupancy modifications and/or enhancements, found in subsequent sections, prescribe more detailed requirements for specific applications. Section 1109B for Group I Occupancies, contains scoping reductions which reduce the total number of required accessible patient bedrooms and related toilets.

Further, an accessible route of travel, as discussed in Section 1114B.1 must by definition (See Section 1102B.) connect all accessible elements and spaces. Therefore, an accessible route of travel need only connect the accessible patient bedrooms and toilets not all patient bedrooms and toilets.

To place accessibility requirements on all patient rooms and toilet rooms would in essence be requiring 100 percent patient room accessibility. This is clearly not the intent of the code. If it had been the intent, the specific percentages and associated modifications would not have been given.

This interpretation is consistent with the Division of the State Architect ~~Jurisdictional~~ Access Policy #98-04 (Accessibility Requirements in Group I Occupancies) effective October 15, 1998, revised April 5, 2000.

ORIGINAL SIGNED	9/21/04
Kurt A. Schaefer	Date

FILE NO. ~~2-1648B~~ 2-1648A

DATE: April 7, 2000

CODE APPLICATION NOTICE

CODE SECTION: ~~1648B~~ 1648A, DIV ~~III-R~~ VI-R, Chapter ~~16B~~ 16A, Part 2, ~~1998~~ 2001
California Building Code

**~~SEISMIC RETROFIT OF SINGLE STORY HOSPITAL BUILDINGS UTILIZING,
WOOD FRAME OR LIGHT STEEL CONSTRUCTION~~**

~~1648B.1~~ 1648A.1 *The existing or retrofitted structure shall be demonstrated to have the capability to sustain the deformation response due to the specified earthquake ground motions. The engineer shall provide an evaluation of the response of the existing structure in its current configuration and condition to the ground motions specified. If the building's seismic performance is evaluated as satisfactory and the peer reviewer(s) [for OSHPD 1: and the enforcement agent] concurs, then no further engineering work is required. When the evaluation indicates the building does not meet the objective of the ~~Division III-R~~ safety goals of this division [for OSHPD 1: and the applicable structural seismic performance (SPC) and nonstructural seismic performance (NPC) requirements,] then a retrofit and/or repair design shall be prepared that yields a structure that meets the life-safety [for OSHPD 1: and operational] performance objectives of Section ~~1640B~~ 1640A of this ~~Division III-R~~ and reflects the appropriate consideration of existing conditions. Any approach to analysis and design may be used that yields a building of reliable stability in the prescribed design earthquake loads and conditions. The approach shall be rational, shall be consistent with the established principals of mechanics, and shall use the known performance characteristics of materials and assemblages under reversing loads typical of severe earthquake ground motions.*

Exception: *Further consideration of the structure's seismic performance can be waived by the Enforcement Agent if both the engineer-of-record and peer reviewer(s) [OSHPD 1: and/or Enforcement Agent] conclude that the structural system can be expected to perform at least as well as required by ~~Division III-R~~ the provisions of this division without completing an analysis of the structure's conformance to these requirements. A detailed report shall be submitted to the responsible Enforcement Agent that presents the reasons and basis for this conclusion. This report shall be prepared by the engineer of record. The peer reviewer(s) [OSHPD 1: and/or Enforcement Agent] shall concur in this conclusion and affirm to it in writing.*

PURPOSE:

The purpose of this CAN is to provide an acceptable approach for seismic retrofit of single story hospital buildings utilizing wood frame or light steel frame construction from SPC-1 level to SPC-2 level. These buildings are typically classified as "Building Type 1- Wood, Light Frame" or "Building Type 2- Wood, Commercial and Industrial" as specified in Section 2.2.3, Article 2, Chapter 6, Part 1, Title 24. This methodology does not apply to single story hospital buildings utilizing wood frame or light steel frame construction with roofing membrane (shingles, tile, etc.) weighing more than 10 psf.

INTERPRETATION:

The relative safety of single story light wood frame or light steel frame constructed buildings has long been recognized. These types of buildings were specifically excluded from the definition of “Hospital building” when used as a skilled nursing or intermediate care facilities [Health and Safety Code Section 129725(b)(2)]. Even though by calculation these buildings may evaluate as an SPC-1, we know from past experience that these building types survive earthquakes without collapse, provided that the building has certain attributes. These attributes include braced cripple walls, adequate connection to the foundation, and, in the case of larger light frame structures, regularly and closely spaced sheathed walls that extend from the foundation to the roof. The SPC-2 criteria is that “These buildings may not be repairable or functional but will not significantly jeopardize life” following strong ground motion. Although these buildings do not normally collapse, there are factors that may jeopardize life as they respond to an earthquake.

Therefore, single-story Building Type 1- Wood, Light Frame structures, and single-story “Building Type 2- Wood, Commercial and Industrial” structures, evaluated per Section 1.3.3, Article 1, Chapter 6, Part 1, Title 24, as an SPC-1 may be placed in category SPC-2 provided the following items have been mitigated and construction completed prior to January 1, 2008:

1. **Cripple Walls per Section 5.6.4, Article 5, Chapter 6, Part 1, Title 24:** This deficiency is considered mitigated with the addition of structural panel sheathing to the inside face of stud of the cripple wall. In addition, single-story hospital buildings utilizing wood frame or light steel frame construction with a floor area greater than 5,000 square feet, this deficiency is considered mitigated provided that the interior shear and or bearing walls are supported below the floor by cripple wall studs with structural panel sheathing and sill plates bolted to the foundation. An acceptable methodology for performing this work is the prescriptive procedure for the repair and/or retrofit of existing buildings specified by the Uniform Code for Building Conservation (UCBC), Appendix Chapter 6.
2. **Foundation Bolting per Sections 8.4.7, Article 8, Chapter 6, Part 1, Title 24:** This deficiency is considered mitigated with the addition of drilled-in anchors to provide the minimum bolt spacing per the structural evaluation procedure.
3. Vertical lateral-force resisting elements must be provided parallel to the length of the building so that, in each resisting direction, there is at least one vertical lateral-force-resisting element within 35 feet of any portion of the building length. Existing sheathed stud walls that extend from the foundation to the roof diaphragm shall be considered to meet this requirement. In buildings made up of multiple diaphragm segments, the vertical lateral-force resisting elements shall be directly attached to the diaphragm segment.
4. Where existing sheathed stud walls do not extend from the ceiling to the roof at a maximum spacing of 35 feet in each direction, existing walls shall be extended to the roof to obtain the maximum spacing of 35 feet. The 35 foot spacing is based on capacities of typical light frame wood building shear walls subject to the estimated earthquake demands calculated from Article 2, Chapter 6, Part 1, Title 24. When substantiated by

structural calculations, the 35 feet may be increased when the shear capacity and overturning stability of the shear walls is adequate. The extended wall portion in the ceiling space shall be anchored to the wall below at each end to resist uplift forces from the design seismic lateral load. The new studs shall be spaced at a maximum of 24 inches on center.

- 5. Bearing and non-bearing stud walls within the ceiling to roof space designated to resist in-plane seismic lateral forces shall be covered with sheathing on at least one side with nailing sufficient to resist the in-plane design seismic lateral force and to transfer that shear force from the roof diaphragm to the sheathed wall portion below. Where the existing sheathing of the wall below the ceiling is gypsum board or plaster, the new structural sheathing in the ceiling to roof space shall consist of gypsum board. The maximum shear capacity of the new gypsum board sheathing shall not be taken to be greater than 100 pounds-per-linear foot (5d nails at 7 inches on center). The maximum shear capacity of walls with gypsum board sheathing on two sides shall not be taken to be greater than 200 pounds-per-linear foot (5d nails at 7 inches on center).

The maximum height (from roof to floor)-to-width ratio of the stud wall shall not exceed 1:1 in order to be considered as resisting the in-plane seismic lateral force. This limitation is based on the stability of the shear wall considering that there are no designed holdown anchors at the ends of the wall at the floor level.

REASON:

This Code Application Notice is provided to address the recognized performance of these building types. It is the Office’s interpretation of Section ~~1648B.1~~ 1648A.1 which states “Any approach to analysis and design may be used that yields a building of reliable stability in the prescribed design earthquake loads and conditions”.

ORIGINAL SIGNED	8/25/04
Kurt A. Schaefer	Date

FILE NO. 2-1648B

DATE: April 7, 2000

CODE APPLICATION NOTICE

NOTE: This CAN applies only to retrofit projects received by the Office prior to November 2, 2002. On November 2, 2002, the 2001 edition of the California Building Standards Code (CBSC) became effective. The 2001 CBSC clarifies and expands the requirements for seismic design. Therefore, this CAN is not applicable to projects submitted on or after that date.

CODE SECTION: 1648B, DIV III-R, Chapter 16B, Part 2, 1998 California Building Code

~~SEISMIC RETROFIT OF STRUCTURE FROM SPC 1 TO SPC 2~~**1648B-Method B**

1648B.1 The existing or retrofitted structure shall be demonstrated to have the capability to sustain the deformation response due to the specified earthquake ground motions. The engineer shall provide an evaluation of the response of the existing structure in its current configuration and condition to the ground motions specified. If the building's seismic performance is evaluated as satisfactory and the peer reviewer(s) [OSHPD 1: and the enforcement agent] concurs, then no further engineering work is required. When the evaluation indicates the building does not meet the objective of the Division III-R safety goals [OSHPD 1: and the applicable structural seismic performance (SPC) and nonstructural seismic performance (NPC) requirements,] then a retrofit and/or repair design shall be prepared that yields a structure that meets the life-safety [OSHPD 1: and operational] performance objectives of Section 1640A of Division III-R and reflects the appropriate consideration of existing conditions. Any approach to analysis and design may be used that yields a building of reliable stability in the prescribed design earthquake loads and conditions. The approach shall be rational, shall be consistent with the established principals of mechanics, and shall use the known performance characteristics of materials and assemblages under reversing loads typical of severe earthquake ground motions.

Exception: *Further consideration of the structure's seismic performance can be waived by the Enforcement Agent if both the engineer-of-record and peer reviewer(s) [OSHPD 1: and/or Enforcement Agent] conclude that the structural system can be expected to perform at least as well as required by Division III-R provisions without completing an analysis of the structure's conformance to these requirements. A detailed report shall be submitted to the responsible Enforcement Agent that presents the reasons and basis for this conclusion. This report shall be prepared by the engineer of record. The peer reviewer(s) [OSHPD 1: and/or Enforcement Agent] shall concur in this conclusion and affirm to it in writing*

PURPOSE:

The purpose of this CAN is to provide an acceptable approach for seismic retrofit of a structure from an SPC 1 level to an SPC 2 level only by modifying the building such that it will pass the detailed evaluation procedures without any unmitigated "False" responses to the evaluation

statements. This methodology does not apply to hospital buildings utilizing “Building Type 8- Concrete Moment Frame” as specified in Section 2.2.3, Article 2, Chapter 6, Part 1, Title 24.

INTERPRETATION:

Analysis and retrofit of existing structures for earthquake loading is complex. Many different approaches to linear and non-linear static, pseudo-dynamic and dynamic analytical procedures have been developed and used in particular cases. However, while there is no consensus on a single acceptable analytical procedure for all circumstances, in general, older buildings with certain attributes have performed adequately in past earthquakes. The Title 24 requirements (Chapter 6, Part 1) for the seismic evaluation of existing hospital buildings identify structures with these desirable attributes. By definition, a building that meets the requirements of SPC-2 outlined in the evaluation procedures meets the requirements for basic life safety. Therefore an acceptable approach for seismic retrofit of a structure from SPC-1 to SPC-2 would be to modify the building, such that it will pass the evaluation procedure without any unmitigated “False” responses to the evaluation statements.

Care must be taken when this approach to retrofit is followed. The evaluation procedures contain many statements that can be classified as “triggers”. These include the “quick check” procedures, and evaluation statements that focus on aspect ratios of structural elements (for example, statements covering overturning and boundary elements in concrete shear walls). Evaluation statements of this nature trigger a detailed analysis of the structure, or may automatically place a building in SPC-1 category. An effective seismic retrofit strategy not only focuses on the evaluation statements, but also includes a full analysis of the structure, to ensure that a complete load path, of sufficient strength, ductility, and stiffness is present.

The evaluation procedure shall be used to identify the principal weaknesses of the structure. Existing structural elements shall be reinforced, and/or new structural elements added, to eliminate or mitigate “False” responses to the evaluation statements. All existing and new or modified elements shall be capable of resisting the design forces and displacement requirements specified in the seismic evaluation procedure, Article 2, Chapter 6, Part 1, Title 24. The detailing of new structural elements shall meet the requirements of the 1998 CBC. Detailing of modified or reinforced structural elements shall meet the provisions of the 1998 CBC. Alternatively the detailing may be substantiated by full scale cyclic testing or by advanced analytical techniques to meet the ductility demand of 4.0 as specified in FEMA 273, Table 6-5 and applies to all types of Lateral Force Resisting systems for the purpose of these regulations.

A detailed analysis of the building shall be performed. Where evaluation statements refer to the “quick check” procedure of Section 2.4.7, Article 2, Chapter 6, Part 1, Title 24, a detailed analysis of the building, including determination of element shear and flexural demands and capacities shall be performed. Where “quick checks” for story drift are required, a detailed three-dimensional analysis of the building will be performed to obtain the story drifts. Allowable story drift is specified in Section 2.4.4, Article 2, Chapter 6, Part 1, Title 24.

REASON:

The retrofit design methodology outlined in Figure 1 provides a simplified approach for strengthening buildings to the SPC-2 performance level. The methodology is most suitable for structures with clearly defined deficiencies. Buildings with systemic problems, for example, nonductile concrete frames or URM bearing wall structures, will not benefit from the application of the simplified technique. Structures with systemic deficiencies require the addition of a new, essentially complete lateral force resisting system of sufficient strength and ductility. Division IIIIR, Method A, or the advanced analytical techniques available under Method B will generate more efficient and cost effective strengthening solutions for these buildings.

ORIGINAL SIGNED	9/17/04
Kurt A. Schaefer	Date

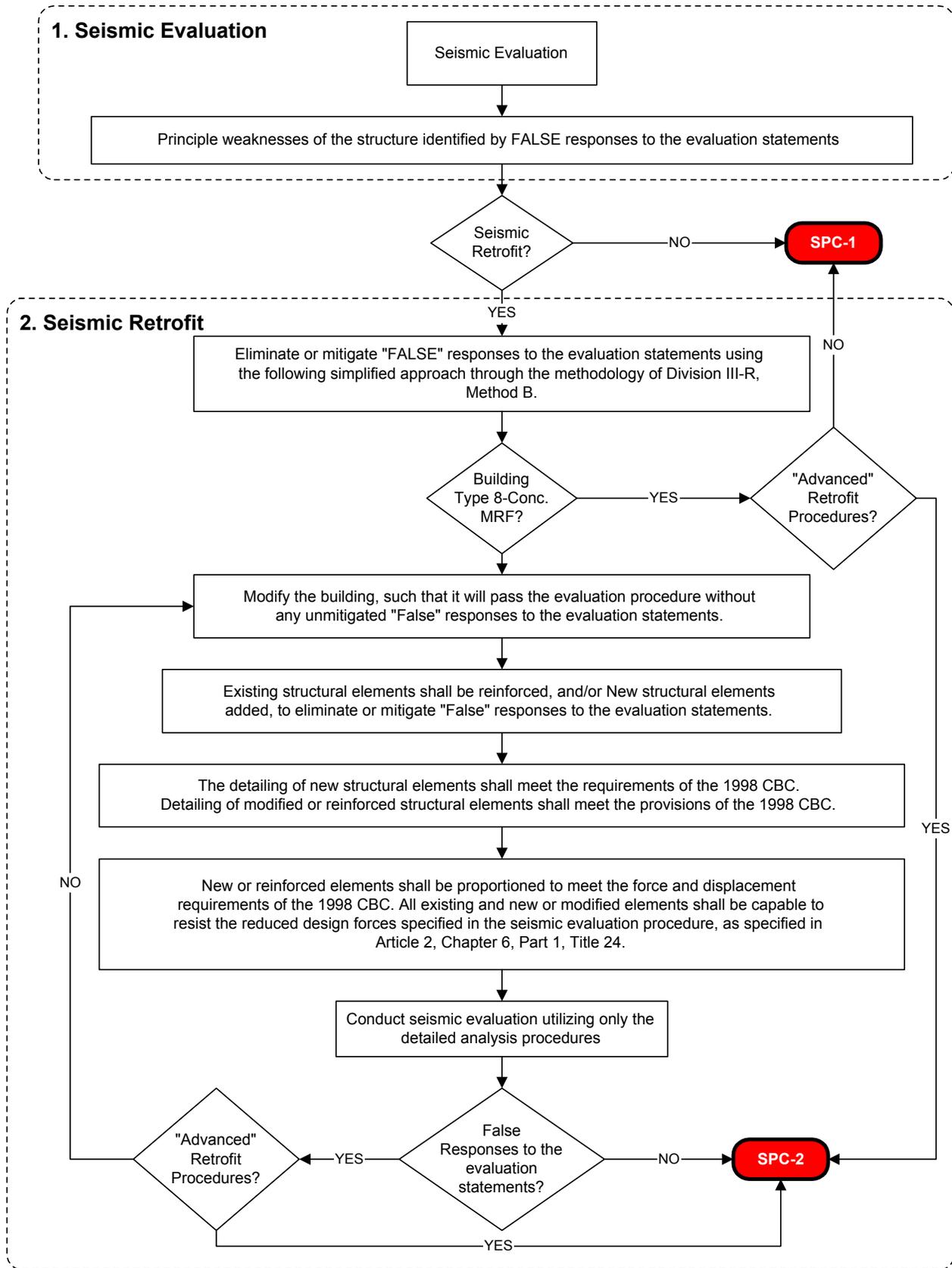


Figure 1 An Acceptable approach to retrofit a Hospital Building from an SPC 1 Level to an SPC 2

CODE APPLICATION NOTICE

CODE SECTION: Section 1925B.3.5, 1998 California Building Code

1925B.3.5 Drilled-in expansion bolts or epoxy-type anchors in concrete. When drilled-in expansion-type anchors are used in lieu of cast-in place bolts, the allowable shear and tension values and test loads shall be acceptable to the enforcement agency.

When expansion-type anchors are listed for sill plate bolting applications, 10 percent of the anchors shall be tension tested.

When expansion-type anchors are used for other structural applications, all such expansion anchors shall be tension tested. Expansion-type anchors shall not be used as hold-down bolts.

When expansion-type anchors are used for nonstructural applications such as equipment anchorage, 50 percent or alternate bolts in a group shall be tension tested.

The tension testing of the expansion anchors shall be done in the presence of the project inspector and a report of the test results shall be submitted to the enforcement agency. If any anchors fail the tension-testing requirements, the additional testing requirements shall be acceptable to the enforcement agency. The above requirements shall also apply to bolts or anchors set in concrete with epoxy if the long-term durability and stability of the epoxy material and its resistance to loss of strength and chemical change at elevated temperatures are established to the satisfaction of the enforcement agency.

INTERPRETATION:**1. Design Loads**

Design loads for expansion-type anchors and epoxy-type anchors should consider the tested capacity of the anchors, the properties of the concrete or masonry in which the anchor is placed, anchor edge distance and spacing, presence of metal deck, and the potential effects of cracking in the concrete or masonry. The long-term durability, stability, and temperature sensitivity of epoxy-type anchors must also be considered.

The mix design and mechanical properties of the materials in which the anchor was tested should be representative of the composition and mechanical properties of the materials in which the anchor will be installed. The relevant mechanical properties include unit weight, compressive strength, and aggregate type.

Exception: The design values for anchors tested in lightweight concrete may be used for anchors installed in normal-weight concrete, provided the compressive strength of the normal weight concrete equals or exceeds the compressive strength of the lightweight concrete in which the anchor was tested.

The compressive strength of the material in which the anchor will be installed should meet or exceed the compressive strength of the material in which the anchor was tested. Where the anchor is qualified for use in lightweight concrete, the lightweight aggregate type used in the concrete in which the anchor will be installed should be the same as the material in which the anchor was tested.

A. **Expansion-type anchors.** Expansion-type anchors may be used, provided the allowable shear and tension values are determined by test, using one of the following methods:

1. The allowable loads may be based on the ultimate shear and tension load data from qualification tests performed in accordance with the *Acceptance Criteria for Expansion Anchors in Concrete and Masonry Elements, AC01*, latest revision, as published by ICBO ES, including the seismic qualification tests of *AC01* Section 5.6. The following safety factors apply for allowable stress design:
 - a. To determine allowable loads, the mean ultimate value should be divided by a factor of safety of four (4) for tension and shear.
 - b. For anchors installed in the underside of a beam/slab, the allowable tension value should be based on the mean ultimate tension value divided by a factor of safety of eight (8).

Exception: Anchors installed in conformance with requirements of Section 2.B.

2. The allowable values listed in an ICBO ES Evaluation Report may be used for allowable stress design, provided the report states that the anchors were tested in accordance with *AC01*, latest revision, including the seismic qualification tests of *AC01* Section 5.6. Strength design values may be used provided the anchors have been tested in accordance with *AC193*, latest revision, including the seismic qualification tests of *ACI 355.2* Sections 9.6 and 9.7.
 - a. Allowable design values for anchors installed with special inspection may be used.
 - b. For anchors installed in the underside of a beam/slab, the allowable tension load should be based on the tabulated value for anchors installed without special inspection, unless allowable values for anchors installed in cracked concrete are provided in the ICBO ES Evaluation Report or the anchors have been tested in accordance with *ACI 355.2*, latest revision, Table 5.2.
3. If anchors have not been tested in accordance with the requirements for seismic qualification tests of Section 5.6 of the latest revision of *AC01*, the allowable

values listed in an ICBO ES Evaluation Report may be used, with the following modifications.

- a. Allowable shear and tension design loads shall be limited to 80% of the tabulated allowable values for anchors installed with special inspection.
- b. For anchors installed in the underside of a beam/slab, the allowable tension load should be based on 80% of the tabulated allowable value for anchors installed without special inspection.

Exception: Anchors installed in conformance with requirements of Section 2.B.

- B. Epoxy-type anchors.** Epoxy-type anchors include anchors that rely on organic and inorganic compounds (including epoxies, polyurethanes, methacrylates and vinyl esters) to develop bond in the concrete.

The use of epoxy-type anchors in overhead applications is not allowed.

Epoxy-type anchors should only be installed in conditioned, interior spaces.

Exception: Where epoxy-type anchors are used as shear dowels at the perimeter of an existing opening (slab or wall) to be filled with concrete, or are being used to connect new concrete elements to existing concrete elements, they may be installed in exterior locations with prior approval of the Office.

If epoxy-type anchors are exposed to fire, all epoxy-type anchors in the affected area should be inspected and evaluated by a qualified person to ensure their load carrying capability has not been compromised.

The allowable shear and tension values for epoxy-type anchors must be determined by test, using one of the following methods:

1. The allowable loads may be based on the ultimate shear and tension load data from qualification tests in accordance with the *Acceptance Criteria for Adhesive Anchors in Concrete and Masonry Elements, AC58*, latest revision, published by ICBO ES. All tests shall include the Seismic Qualification procedures of Section 5.3.7 of *AC 58*. The following safety factors apply for allowable stress design:
 - a. To determine allowable loads, the mean ultimate values should be divided by a factor of safety 5.33 to determine allowable tensile and shear loads.
 - b. If creep tests are performed in accordance with Section 5.3.3 of *AC58*, the mean ultimate values should be divided by a factor of four (4) to determine allowable tensile and shear loads.

2. The allowable loads may be based on the allowable load values listed in an ICBO ES Evaluation Report that complies with the requirements of AC58 for a specific anchor in the same configuration as tested. Supporting data shall include the Seismic Qualification test performed in accordance with the procedures of Section 5.3.7 of AC58.
3. Where epoxy-type anchors are used for structural applications, such as dowels between new and existing concrete, the anchor shall be installed in a manner such that the ultimate tensile capacity of the steel element can be reliably developed, i.e., the anchor capacity is controlled by the ultimate strength of the steel element.

Exception: Epoxy-type anchors which cannot develop the tensile capacity of the steel element may be used to transfer shear forces only, provided that the loads on the anchor are amplified by a factor of 4.0. Alternatively, shear resistance may be based on the bolt shear capacities in the 1998 CBC, Table 19B-E.

When epoxy-type anchors are used to resist tensile forces in structural applications, the minimum depth of embedment shall be greater than or equal to the development length l_d determined in Section 1912B.1 for a cast in place reinforcing bar of the same diameter and grade.

2. **Installation Requirements**

All anchors should be installed per the requirements of the ICBO ES Evaluation Report for the specific anchor, or as required by the manufacturer.

For epoxy-type anchors, all drilled holes should be prepared in accordance with manufacturer's recommendations, thoroughly cleaned, and all debris removed by vacuum or oil-free compressed air. Jetting holes with water is not permitted.

Set torque-controlled expansion-type anchors to the manufacturer recommended installation torque, using a calibrated torque wrench. Following attainment of 10% of the specified torque, 100% of the specified torque shall be reached within 7 or fewer complete turns of the nut. If the specified torque is not achieved within the required number of turns, the anchor shall be removed or abandoned.

Set displacement-controlled expansion-type anchors to the manufacturer recommended displacement. If the concrete cracks during installation of the anchor, the anchor shall be removed or abandoned.

Holes drilled for anchors that do not set properly or fail a tension test may not be reused, and shall be filled with non-shrink grout.

- A. **Embedment, Spacing and Edge Distance.** All anchors should meet the minimum embedment, edge distance, spacing, and slab thickness criteria established by the relevant ICBO ES Evaluation Report.
1. Edge distance should be a minimum of ten (10) bolt diameters from the free edge of the slab and center-to-center spacing should be a minimum of twelve (12) bolt diameters, unless data is submitted indicating full anchor tension and shear capacity at a closer distance. If the edge distance is less than ten (10) diameters and the load is directed toward the free edge, the allowable shear load should be reduced per Section 1925B.3.3.
 2. Expansion-type and epoxy-type anchors shall be installed to comply with the minimum slab thickness requirements established by the manufacturers technical guide for the specified anchor provided sufficient test data is provided to support the installation.
 3. If an ICBO ES Evaluation Report is not available for an epoxy-type anchor or expansion-type anchor, test data should be submitted to the Office to determine the appropriate edge, spacing, and minimum thickness dimensions.
- B. **Underside of beam/slab installations.** Except as noted in Section 2.B.1, all expansion-type anchors installed in the underside of a beam/slab should use the reduced allowable design load values determined in Sections 1.A.1.b, 1.A.2.b, and 1.A.3.b.
1. The allowable design loads in Sections 1.A.1.a, 1.A.2.a, and 1.A.3.a may be used for expansion-type anchors installed in the underside of a beam/slab, provided the installation meets one of the following criteria:
 - a. The design engineer provides dimensions that indicate the anchor installation will occur in the negative moment (-M) region of the beam/slab, or
 - b. Data is submitted to indicate that the specific anchor is suitable for use in cracked concrete (e.g., testing per *ACI 355.2* Table 5.2), or
 - c. The anchor is installed in the high flute (rib) of the metal deck in a concrete on metal deck assembly, or
 - d. The anchor is installed with sufficient embedment that the load-transfer zone is above the neutral axis of the beam or slab.
- Exception: If the slab is intended to serve as a diaphragm for transferring earthquake forces to other lateral-load resisting elements, anchors to be installed in that slab must be qualified by test for use in cracked concrete.

2. When installing expansion-type anchors through the low flutes of metal deck into concrete, the anchors should be placed as close to the center of the flute width as practicable. The deck should be 20 ga. thickness minimum per Section 2204B.2 and the flute width should meet or exceed that value set forth in the ICBO ES Evaluation Report for the anchor or as otherwise tested, but not less than 4 inches. The minimum effective depth of embedment shall be as noted in the ICBO ES Evaluation Report for the anchor.

3. **Testing Requirements**

All anchors shall be tested per Section 1925B.3.5.

Exception: Where the design tension on anchors is less than 75 lbs. and those anchors are clearly noted on the contract documents, only 10 percent of those anchors need be tested.

If any anchor fails testing, test all anchors of the same type, installed by the same trade, not previously tested until twenty (20) consecutive anchors pass, then resume the initial test frequency. Refer to Note 8 on the Test Values Table (attached) for failure criteria.

Regardless of which test methods are chosen by the consultant(s), the test values shall be shown on the contract documents.

A. **Expansion-type Anchors.**

An acceptable testing procedure is attached to this CAN. The test load may be applied by any method that will effectively measure the tension in the anchor, such as direct pull with a hydraulic jack, calibrated spring loaded devices, or a calibrated torque wrench. Displacement-controlled anchors such as internal threaded shell-type anchors and self-threading screw-type anchors shall not be tested using a torque wrench.

Required test loads may be determined by either of the following methods:

1. Twice the allowable tension load as determined in Section 1, or;
2. Tension test and torque test values from the table and procedures attached to this CAN.

Anchors tested with a hydraulic jack should exhibit no discernable movement during the tension test, e.g., as evidenced by loosening of the washer under the nut.

Anchors tested with a calibrated torque wrench must attain the specified torque within ½ turn of the nut.

Exception: Undercut anchors that are so designed to allow visual confirmation of full set need not be tension or torque tested.

B. Epoxy-type Anchors

Epoxy-type anchors shall be tension tested per Section 1925B.3.5. The tension test load shall be equal to twice the allowable load for the specific location of the anchor to be tested (i.e., accounting for edge distance) or 80% of the yield strength of the bolt ($0.8A_bF_y$), whichever is less. The test procedures for expansion-type anchors in the attached table shall be used for epoxy-type anchors. Torque testing of epoxy-type anchors is not permitted

Where epoxy-type anchors are used as shear dowels across cold joints in slabs on grade and the slab is not part of the structural system, testing of those dowels is not required.

Anchors should exhibit no discernible movement during the tension test.

REASON:

Section 1925B.3.5 requires that the enforcement agency establish acceptable values for expansion and adhesive type anchors. This CAN establishes those values for use by the design community.

While current ICBO ES Evaluation Reports severely limit the use of expansion anchors in high seismic regions, observed performance of these anchors in hospital construction has proven satisfactory. The Office attributes this performance to special inspection procedures, and the requirement for testing 50% of the installed anchors to ensure proper installation procedures by the contractor.

The table of allowable tension and torque values is based on specific test procedures developed to derive the table. Those procedures and/or limitations are necessary to ensure that the listed tension or torque values are suitable for determining the adequacy of the installation by the contractor.

ORIGINAL SIGNED	9/3/02
Kurt A. Schaefer	Date

TEST VALUES
Hardrock or Lightweight Concrete

<u>ANCHOR</u> DIA. (in)	<u>WEDGE</u>		<u>SLEEVE</u>		<u>SHELL</u>	
	LOAD (lbs)	TORQUE (ft-lbs)	LOAD (lbs)	TORQUE (ft-lbs)	LOAD (lbs)	TORQUE (ft-lbs)
1/4	800	10	400	4	1000	-
5/16	-	-	400	5	1400	-
3/8	1100	25	700	10	1800	-
1/2	2000	50	900	20	2700	-
5/8	2300	80	1100	45	3700	-
3/4	3700	150	1400	90	5400	-
1	5800	250	-	-	-	-

NOTES

1. Anchor diameter refers to the thread size for the WEDGE & SHELL categories and to the anchor outside diameter for the SLEEVE category.
2. Apply proof test loads to WEDGE & SLEEVE anchors without removing the nut if possible. If not, remove nut & install a threaded coupler to the same tightness as the original nut using a torque wrench & apply load.
3. For SLEEVE/SHELL internally threaded categories, verify that the anchor is not prevented from withdrawing by a baseplate or other fixtures. If restraint is found, loosen and shim or remove fixture(s) prior to testing.
4. Reaction loads from test fixtures may be applied close to the anchor being tested, provided the anchor is not restrained from withdrawing by the fixture(s).
5. SHELL type anchors should be tested as follows:
 - a. Visually inspect 25% for full expansion as evidenced by the location of the expansion plug in the anchor body. Plug location of a fully expanded anchor should be as recommended by the manufacturer, or, in the absence of such recommendation, as determined on the job site following the manufacturer's installation instructions. At least 5% of the anchors shall be proof loaded as indicated in the table above, but not less than three anchors per day for each different person or crew installing anchors, or;
 - b. Test 50% of the installed anchors per Section 1925B.3.5.
6. Test equipment (including torque wrenches) is to be calibrated by an approved testing laboratory in accordance with standard recognized procedures.
7. Torque test values for SHELL type anchors can occur on a case-by-case basis when test procedures are submitted and approved by the enforcement agency.
8. The following criteria apply for the acceptance of installed anchors:

HYDRAULIC RAM METHOD: The anchor should have no observable movement at the applicable test load. For wedge and sleeve type anchors, a practical way to determine observable movement is that the washer under the nut becomes loose.

TORQUE WRENCH METHOD: The applicable test torque must be reached within the following limits;
 Wedge or Sleeve type: One-half (1/2) turn of the nut.
 One-quarter (1/4) turn of the nut for the 3/8 in. sleeve anchor only.
9. Testing should occur a minimum of 24 hours after installation of the subject anchors.
10. If the manufacturer's recommended installation torque is less than the test torque noted in the table, the manufacturer's recommended installation torque should be used in lieu of the tabulated values.
11. All tests shall be performed in the presence of the Inspector of Record.

FILE NO. 2-3405

DATE: June 8, 2005

CODE APPLICATION NOTICE

CODE SECTION: Title 24, Part 2, California Building Code (CBC)**SECTION 3405 – CHANGE IN USE**

No change shall be made in the character of occupancies or use of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of this code for such division or group of occupancy.

EXCEPTION: The character of the occupancy of existing buildings may be changed subject to the approval of the building official, and the building may be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

SECTION 420A.2 Application. New buildings and additions, alterations or repairs to existing buildings subject to licensure shall comply with applicable provisions of the California Electrical Code, California Mechanical Code, California Plumbing Code (Parts 3, 4 and 5 of Title 24) and this chapter.

EXCEPTIONS: 1. Facilities licensed and in operation prior to the effective date of this chapter shall not be required to institute corrective alterations or construction to comply with any new requirements imposed thereby or subsequently, except where specifically required or where the enforcing agency determines that a definite hazard to health and safety exists.

...

INTERPRETATION:

In an effort to achieve compliance with the requirements of SB 1953, hospital facilities may consider removal of acute care services from nonconforming hospital buildings. The removal of acute care services may result in a change of the use or occupancy of a building, a change in the license, a change of the authority having jurisdiction, or a combination of these things.

When the removal of services also results in a change of occupancy group or division, compliance with current code requirements for the new occupancy or use may be required, pursuant to CBC Section 3405.

A change in the licensed services provided in the building, or a change of licensure of the facility, may also require compliance with current code requirements, pursuant to CBC Section 420A.2. Such a change may include, but is not limited to, conversion of beds on the existing acute care license from general acute to skilled nursing or acute psychiatric beds, or conversion of the facility from a general acute care hospital to a skilled nursing facility, acute psychiatric hospital, or outpatient clinical services building.

Change of licensure of a building may require the building to change jurisdiction from OSHPD to the local building department. Because OSHPD only has statutory authority for the review of general acute care hospitals, skilled nursing or acute psychiatric services under the acute care hospital license, a separately licensed skilled nursing facility or acute psychiatric hospital, or buildings housing outpatient clinical services, as defined in Health and Safety Code Section 129725, a building must remain or be converted to one of these licensed services in order to remain under the jurisdiction of the Office. If a building is converted to uses other than those listed, it may not remain under the jurisdiction of the Office. A project must be submitted to OSHPD to remove the building from the jurisdiction of the Office and transfer jurisdiction to the local building department.

The following guidelines are intended to provide direction for determining when this change of use or licensure will require compliance with current code, and to what extent compliance will be required.

1. When acute care services are removed from a building which is intended to be used for skilled nursing or acute psychiatric services, and the new services will be licensed under the existing license of the general acute care hospital, the building need not be upgraded to comply with current code requirements, unless a specific fire risk or health and safety hazard exists. However, since the physical plant requirements for acute care hospital services differ from the physical plant requirements for acute psychiatric or skilled nursing services, the facility may need to be modified to comply with the applicable requirements for the new service. Any modifications will be required to comply with the current provisions of the California Building Standards Code, including CBC Chapters 420A, 421A, and 11B. An OSHPD permit will be required for any work performed.

The building will remain a Group I, Division 1.1 occupancy classification, so the requirements for change of use per Section 3405 are not a consideration, unless the Office determines there is an increased life or fire risk. Also, the facility remains licensed and in operation in accordance with Section 420A.2, exception 1, so there is no need to make any modifications other than to comply with the physical plant requirements of the new service, unless the Office determines that a definite hazard to health and safety exists.

2. When acute care services are removed from a building, and the new services provided in the building are issued a new license as a skilled nursing facility or acute psychiatric hospital, the building must be upgraded to comply with all current code requirements, including, but not limited to, the structural requirements of current code and physical plant requirements for the new service.

Although the building will remain a Group I, Division 1.1 occupancy, the new facility was not licensed and in operation as stipulated in CBC Section 420A.2. The facility therefore must comply with all current code requirements. An OSHPD permit will be required.

3. When acute care services are removed from a building which is intended to be used for outpatient clinical services on the existing acute care hospital license, and the building owner elects to keep the building under the jurisdiction of the Office, the building need not be upgraded to comply with current code requirements, unless a specific fire risk or health and

safety hazard exists. Modifications may be required for the building to meet the current OSHPD 3 requirements of the code for the new use.

The building will change from a Group I, Division 1.1 occupancy to another occupancy classification, and could therefore be required to comply with current code based on Section 3405. However, the new use as outpatient clinical services is considered by the Office to be less hazardous than the previous hospital use, so the building will not be required to comply with current code requirements per the exception to Section 3405, unless the Office determines there is an increased life or fire risk. Since no change of licensure is needed, the building is not required to comply per Section 420A.2, unless the Office determines that a definite hazard to health and safety exists. An OSHPD permit will be required for any work done to achieve OSHPD 3 compliance.

- 4. When acute care services are removed from a building, and the building owner elects to remove the building from the jurisdiction of the Office, the local jurisdiction will be responsible for determining what code requirements are applicable, and what, if any, construction work may be required.

A project must be submitted to the Office to remove a building from OSHPD jurisdiction. This project must demonstrate that any adverse impacts upon the remaining hospital buildings have been mitigated. Adverse impacts may include, but are not limited to, structural, seismic separation, utilities and egress systems. Once this project has been approved, the Office will release jurisdiction of the building, notifying the building owner, the local building official and the Department of Health Services.

REASON:

This Code Application Notice is intended to clarify the requirements related to the conversion of buildings from acute care purposes to other uses.

ORIGINAL SIGNED	6/9/05
Kurt A. Schaefer	Date

CODE APPLICATION NOTICE

CODE SECTION: Sections ~~1108A.3 and 3504.1~~ 3505.1, ~~1995~~ 2001 California Building Code
(Sections ~~3104(f) and 6004(a)~~, 1992 California Building Code)

~~When fire-protective signaling systems are provided, in occupancies regulated by the State Fire Marshal (see Section 101.17 (Section 110, Item 13), 1995 California Building Code) they shall include visual alarms in the following areas:~~

Sec. 4-4.5 Notification Appliances for the Hearing Impaired. Approved notification appliances for the hearing impaired shall be installed in the following areas:

1. Restrooms
2. Corridors
3. Music practice rooms
4. Band rooms
5. Gymnasiums
6. Multipurpose rooms
7. Occupational shops
8. Occupied rooms where ambient noise impairs hearing of the fire alarm
9. Lobbies
10. Meeting rooms
11. Any other area for common use

INTERPRETATION:

When fire-protective signaling systems are provided, they shall include visual alarms in the following areas:

1. **RESTROOMS AND SIMILAR USES**, to include:

public restrooms
staff restrooms
patient restrooms, serving other than individual patient rooms
locker rooms
dressing rooms

Visual devices are not required in patient room restrooms provided exclusively for use by inpatients in I-1.1 Occupancies. Section 308.9 (~~Section 1009~~), ~~1995~~ 2001 California Building Code.

2. **CORRIDOR SYSTEM AND SIMILAR USES, to include:**

public corridors
staff corridors
service corridors
vestibules
passageways

3. **GYMNASIUMS AND SIMILAR USES, to include:**

physical therapy
rehabilitation therapy
occupational therapy

4. **MULTIPURPOSE ROOMS AND SIMILAR USES, to include:**

auditoriums
dining rooms
cafeterias
outdoor patios & courts that require exiting through the building and are an occupiable portion of the building.

5. **OCCUPIED ROOMS WHERE AMBIENT NOISE IMPAIRS HEARING OF THE FIRE ALARM AND SIMILAR USES, to include:**

kitchens
laundry areas
central sterilization
mechanical equipment rooms
generator rooms
boiler rooms
power plants

6. **LOBBIES AND SIMILAR USES, including elevator lobbies:**

No further specifications.

7. **MEETING ROOMS AND SIMILAR USES, to include:**

conference rooms
waiting rooms
reception rooms/areas
lounges
chapels

8. **ANY OTHER AREA FOR COMMON USE WITH AN OCCUPANT LOAD OF AT LEAST SEVEN (7) AND SIMILAR USES, to include:**

- pharmacies
- laboratories
- office rooms/areas

9. **ROOMS USED FOR SLEEPING AND SIMILAR USES, (NOT TO INCLUDE PATIENT ROOMS).**

Sleeping rooms and suites for persons with hearing impairments shall have a visual fire alarm connected to the building fire-protective signaling system per Section 1111B.4.5 (~~Section 3104(g)~~, 1995 2001 California Building Code. Application of this requirement shall be by sleeping room/suite type (e.g. doctors sleeping, family sleeping, etc).

When used in lieu of audible devices in patient occupied areas, visual devices shall be located in all rooms and areas. Section 308.9 (~~Section 1009~~), 1995 2001 California Building Code.

REASON:

Clarification is needed to specify locations where visual devices are required in health care occupancies.

ORIGINAL SIGNED

9/21/04

Kurt A. Schaefer

Date

FILE NO. 3-110.2

DATE: December 3, 1990

CODE APPLICATION NOTICE

CODE SECTION: Section 110.2, ~~2001~~ 2004 California Electrical Code

110.2. Approval. The conductors and equipment required or permitted by this *Code* shall be acceptable only if approved.

INTERPRETATION:

Equipment shall be approvable if it is listed, labeled or certified for its use by a Nationally Recognized Testing Laboratory (NRTL) as recognized by the U.S. Department of Labor, Occupational Safety and Health Administration.

REASON:

The question of what constitutes approval often arises in conjunction with various types of equipment to be installed in health care facilities. The code is unclear as to exactly what criteria constitutes approval of specific types of equipment.

The above interpretation is consistent with the intent of Sections 90.1, 90.4, 90.7 and 110.3 of the ~~2001~~ 2004 California Electrical Code. The interpretation is reasonable and provides staff with a "standard" means of evaluating whether a particular piece of equipment should or should not be approved for installation.

ORIGINAL SIGNED

4/24/2007

John D. Gillengerten

Date

FILE NO. 3-220-11

DATE: February 11, 1998

CODE APPLICATION NOTICE**CODE SECTION:** Section 220-11 (TABLE 220-11), California Electrical Code

220-11. General Lighting. The demand factors ~~listed~~ specified in Table 220-11 shall apply to that portion of the total branch-circuit load computed for general illumination. They shall not be applied in determining the number of branch circuits for general illumination.

(Excerpt From Table 220-11)

(For) Hospitals* First 50,000 (volt-amperes) at 40 (%)
 Remainder over 50,000 (volt-amperes) at 20 (%)

* The demand factors of this table shall not apply to the computed load of feeders ~~to~~ or services supplying areas in hospitals, hotels, and motels where the entire lighting is likely to be used at one time, as in operating rooms, ballrooms, or dining rooms.

INTERPRETATION:

The factors of CEC Table 220-11 shall not be allowed to be applied in the following areas of hospitals:

- 1) Surgery Suite (entire), including recovery
- 2) Emergency Department (entire)
- 3) Kitchen-Food Service-Dining Area
- 4) Critical Care Areas as defined in CEC 517
- 5) Elevator Lobbies and all Corridors
- 6) Loads connected to the Life Safety Branch of the Emergency System
- 7) Inpatient Nursing Stations
- 8) Loads connected to the Critical Branch of the Emergency System

Administrative Areas of the hospital shall be included under the "All Others" type of occupancy of CEC Table 220-11 for lighting only.

The factors of CEC Table 220-11 shall be allowed to be applied in all areas of hospitals not mentioned above, including General Care Patient Rooms and General Care Patient Isolation Rooms.

REASON:

The interpretation described above is based on a recent Hospital Building Safety Board Appeal decision.

ORIGINAL SIGNED

8/25/04

Kurt A. Schaefer

Date

REVISION: August 18, 2004

FILE NO. 3-517-16

DATE: July 12, 1993

CODE APPLICATION NOTICE

CODE SECTION: Section 517-16, California Electrical Code

517-16. Receptacles with Insulated Grounding Terminals. Receptacles with insulated grounding terminals as permitted in Section ~~250-74~~ 250-146(d), ~~Exception No. 4~~, shall be identified; such identification shall be visible after installation.

INTERPRETATION:

~~Insulated~~ Isolated ground receptacles, where required for the reduction of electrical noise (electromagnetic interference) on the grounding circuit, are permitted in patient care areas of hospitals. Two insulated equipment grounding conductors shall be run with the branch circuit conductors supplying the receptacle; one shall be the isolated ground conductor and the other shall be the equipment grounding conductor required by CEC 517-13(a). The ~~isolated~~ insulated grounding conductor shall terminate on the grounding terminal of the receptacle; the equipment grounding conductor required by CEC 517-13(a) shall ground the outlet box on which the receptacle is installed.

~~Insulated~~ Isolated ground receptacles shall be identified by an orange color or an orange triangle located on the face of the receptacle as required by Section 410-56(c). Additionally, ~~insulated~~ isolated ground receptacles in patient care areas shall be identified with a permanent sign that reads "Caution - Not for Patient Equipment Use".

REASON:

This interpretation coordinates and clarifies the requirements of CEC 517-13, 517-16, ~~250-74~~ 250-146(d), and 410-56(c) as they apply to insulated ground receptacles in patient care areas.

~~Insulated~~ Isolated ground receptacles do not satisfy the implied requirement of CEC 517-13 for parallel ground paths. A sign is provided to alert staff to the increased risk of connecting patient care equipment to the receptacle.

ORIGINAL SIGNED

9/21/04

Kurt A. Schaefer

Date

FILE NO. 3-700-4(a)

DATE: February 2, 2001

CODE APPLICATION NOTICE

CODE SECTION: Section 700-4(a), ~~1998~~ 2001 California Electrical Code
Section 101.7, ~~1998~~ 2001 California Building Code

1998 2001 California Electrical Code

700-4(a) Conduct or Witness Test. The authority having jurisdiction shall conduct or witness a test of the complete system upon installation and periodically afterward.

1998 2001 California Building Code

101.7 Standard Reference Documents. *The codes, standards, and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code.*

When this code does not specifically cover any subject relating to building design and construction, recognized fire-prevention engineering practices shall be employed. The National Fire Codes and the Fire Protection Handbook of the National Fire Protection Association may be used as authoritative guides in determining recognized fire-prevention practices.

INTERPRETATION:

Permanently installed on-site generator sets for health care facilities shall be tested in accordance with the ~~1996~~ 1999 NFPA 110 Standard for Emergency and Standby Power Systems, Section 5-13 Installation Acceptance. All safety devices shall be tested as specified in Section 5-13.2.9, however the safety devices provided may comply with NFPA-99 Section 3-4.1.1.14 in lieu of NFPA-110 Section 3-5.5.2. The emergency power supply system shall be considered as a Level 1 system for testing purposes. Upon loss of normal power the emergency power supply system shall provide emergency power within 10 seconds as required by CEC 700-12. Personnel from the Office of Statewide Health Planning and Development shall not conduct testing but shall witness installation acceptance testing.

For additional requirements related to combustion engines and gas turbines, refer to CANs 2-413A.2.3 and 2-413A.1.

REASON:

The current code does not specifically cover what tests are required upon completing the installation of an on-site generator set. This can lead to confusion and/or disputes during the final phase of a project as to what specific tests are necessary. The acceptance testing requirements in NFPA-110, ~~1996~~ 1999 Standard for Emergency and Standby Power Systems are a nationally recognized standard that completely details the specific tests required for testing on-site generator sets.

ORIGINAL SIGNED

8/25/04

Kurt A. Schaefer

Date

FILE NO. ~~4-331~~ 4-316.0

DATE: April 4, 1995

CODE APPLICATION NOTICE

CODE SECTION: Section ~~331~~ 316.0, 1995 2001 California Mechanical Code
(~~Section 2102(f), 1992 California Mechanical Code~~)

Section ~~331~~ 316.0 (~~Sec. 2102(f)~~) During periods of power outages emergency electrical power shall be provided for the following equipment:

~~331.1~~ 316.1 All heating equipment necessary to maintain a minimum temperature of 60°F. (15.6°C.) in patient areas which are not specified in Table ~~330~~ 315.

~~331.2~~ 316.2 All heating equipment necessary to maintain the minimum temperatures for sensitive areas as specified in Table ~~330~~ 315.

~~331.3~~ 316.3 Equipment necessary for humidification of the areas listed in Table ~~330~~ 315.

~~331.4~~ 316.4 All supply, return and exhaust fans required to maintain the positive and negative air balances as required in Table ~~No. 4-A~~.

~~331.5~~ Boiler systems shall comply with Section ~~329~~ and shall be designed to maintain a minimum temperature of 60°F. (15.6°C.) in patient areas and the temperatures specified in Table ~~330~~, for sensitive areas during periods of breakdown or maintenance of any one boiler.

INTERPRETATION:

Application: Hospitals and Nursing Facilities (SNF and ICF)

Section ~~331~~ (~~Section 2102(f)~~) 316.0, 1995 2001 California Mechanical Code refers solely to the provision of emergency electrical power, for the listed equipment, during periods of power outage. The section is not to be construed as requiring:

1. Dual fuel heating equipment (i.e., secondary fuel for gas fired boilers).
2. Electrical heating equipment in addition to gas fired heating equipment (i.e., electric duct heaters in addition to gas fired rooftop units).

REASON:

It is not the policy of FDD plan review to dictate design but rather to obtain compliance with code. Until the code is amended to require alternative fuel sources when utilizing natural gas, no such requirement shall be imposed on designs submitted to the Office. Facilities under program flexibility to provide an alternative fuel source for gas fired heating equipment shall be notified that it is not a code requirement under Section ~~331 (Section 2102(f))~~ 316.0.

ORIGINAL SIGNED

8/25/04

Kurt A. Schaefer

Date

CODE APPLICATION NOTICE

CODE SECTION: Section 408.1.5, Exception, 2001 California Mechanical Code

Exception. Dry steam-type humidifiers for local room humidity control may be installed downstream of filter bank No. 2 where designs are specifically approved by the enforcing agency.

INTERPRETATION:**A. Humidifiers upstream of final filters:**

There is no code restriction on installation of humidifiers upstream of the final filter. However, care should be taken to provide sufficient distance between the humidifier and filter and/or coils to allow for proper absorption of vapor by the airstream to prevent wetting of filters and coils.

B. Humidifiers located downstream of final filters:

OSHPD interprets "dry steam" to be dry saturated steam as defined by the 2000 ASHRAE Handbook (HVAC Systems and Equipment), Chapter 10, which defines "dry saturated steam" as "pure vapor without entrained water droplets."

Plans and/or specifications shall explain and detail how the proposed humidification device will provide dry steam as defined by ASHRAE.

1. One accepted means of providing dry steam is by means of a jacketed (double wall distribution tube) steam injector type humidifier with accessories for conditioning superheated steam to remove particulate matter and condensate before dispersing dry steam to the airstream. Such devices, when properly installed, will disperse dry steam without entrained water droplets and thus will prevent wetted duct surfaces downstream of the humidifier. If steam from a central boiler plant will be injected directly into the airstream, it is recommended but not required that the design professional ~~should~~ verify that the boiler water will not be treated with chemicals or contain minerals which are known to be hazardous to health or which might contribute to an indoor air quality problem.
2. Another acceptable means of providing dry steam will be a properly designed and installed, boiling water vapor injection type humidifier with the steam generation chamber in an accessible location outside the conditioned airstream. Vapor shall be injected into the conditioned airstream by means of a properly designed and installed distribution tube or tubes. The steam distribution tube(s) shall have provisions for condensate drainage and shall be designed and installed to prevent condensate in the distribution tube(s) from being ejected into the conditioned airstream. The distance

(Additions or changes indicated by underline; deletions by strikeout)

between the steam generator and the duct distribution tube(s) shall not exceed manufacturer's recommendations.

Due to potential for bacterial growth in the reservoirs of boiling water vapor injection type humidifiers, the water reservoir shall be equipped for timed flushing cycles. Other acceptable means of preventing bacterial multiplication in the reservoir will be considered. If a timed flush cycle is employed, the frequency shall be sufficient to prevent bacterial populations from multiplying to levels which could be hazardous to patients or hospital staff.

3. Humidifiers that discharge dry steam directly into the room air are not acceptable.

Other means of providing humidification downstream of the final filter bank will be considered on a case-by-case basis.

C. All humidifiers:

Regardless of humidifier type, all humidifiers shall be specified and installed with proper downstream distances to obstructions and/or restrictions which could be sites for condensation. Factors such as air velocity, airstream temperature, humidification load and relative humidity of the airstream shall be taken into consideration. Air flow proving devices and downstream humidity high limit controls shall be provided.

Construction documents shall detail how the distribution tubes are to be installed, indicating minimum distances from changes in direction and other potential points of condensation. Appurtenant piping and accessories shall also be detailed. Psychometric analysis or other acceptable means, shall be provided to verify that dry steam will be supplied.

Mechanical means of humidification, such as atomizers, and humidifiers requiring direct contact of conditioned air with water or wetted surfaces are not permitted.

REASON:

The intent of the requirement for dry steam type humidifiers is to prevent direct contact of conditioned air with water or wetted surfaces which could foster the growth of bacteria (including Legionella) in the HVAC system.

(Additions or changes indicated by underline; deletions by strikeout)

Clean, uncontaminated ductwork is a joint responsibility of the design professional, installing contractor, and the hospital maintenance staff. This Code Application Notice addresses the design and installation considerations necessary to prevent direct contact of conditioned air with wetted surfaces which could become sites for bacterial growth. Proper maintenance of the system is the responsibility of the health care facility and is regulated by other Titles of the California Code of Regulations.

ORIGINAL SIGNED

11/13/03

Kurt A. Schaefer

Date

(Additions or changes indicated by underline; deletions by strikeout)

FILE NO. 4-408 4-407

DATE: November 28, 2001

CODE APPLICATION NOTICE

CODE SECTION: Section 408.2.3.1 407.2.3.1, 2001 ~~1998~~ California Mechanical Code
Section 408.3.2.1 407.3.2.1, 2001 ~~1998~~ California Mechanical Code

Section 408.2 407.2 Filters for Hospitals:

Section 408.2.3.1 407.2.3.1 Subject to the approval of the authority having jurisdiction, noncentral recirculating air-handling systems, i.e., through-the-wall units, may be utilized for single patient rooms of one or more beds. Filtration for these units shall have a minimum arrestance value of 68 percent, based on ASHRAE Standard 52.1-1996. The air ventilation system providing the minimum air changes of outdoor air shall comply with Table 4-B.

Section 408.3 407.3 Filters for Skilled Nursing Facilities, Intermediate Care Facilities and Correctional Treatment Centers:

Section 408.3.2.1 407.3.2.1 Noncentral recirculating air-handling systems, i.e., through-the-wall units, may be utilized for each patient room with one or more beds. Filtration for these units shall have a minimum arrestance value of 68 percent, based on ASHRAE Standard 52.1-1996. The air ventilation system providing the minimum air changes of outdoor air shall comply with Table 4-C.

INTERPRETATION:

Sections 408.2.3.1 407.2.3.1 and 408.3.2.1 407.3.2.1 shall be interpreted to permit the use of noncentral fan-coil units and noncentral heat pumps and air conditioners for heating and/or cooling of patient bedrooms subject to the following conditions:

1. All outdoor air requirements shall be met by a separate central air handling system with the proper filtration and gauges, as required by Tables 4-B and 4-C for the applicable facility type.

Note: Outdoor air, filtered in accordance with Table 4-B or Table 4-C, as applicable, may be introduced into the patient room through the fan-coil.

2. All noncentral air handling units with filter efficiencies as stated in sections 408.2.3.1 407.2.3.1 and 408.3.2.1 407.3.2.1 are permissible only for non-specialized medical-surgical or skilled nursing patient bedrooms and shall not apply to specialized rooms such as isolation rooms (positive or negative pressure) or special purpose rooms.
3. Each individual noncentral air-handling system shall serve only a single patient room of one or more beds.

(Additions or changes indicated by underline; deletions by strikeout)

- 4. Each noncentral recirculating air handler unit shall be 100% recirculating; i.e., the units shall not be used to introduce outdoor air into the room (except as noted in Item 1).
- 5. All fans shall operate continuously.

REASON:

The use of noncentral units is one method of providing individual room ventilation and temperature control. Code language is unclear regarding whether the use of filters with a minimum arrestance value of 68% in noncentral air-handling units is limited only to through-the-wall units.

Section ~~407.2.3.1~~ 408.2.3.1 states: “Subject to the approval of the authority having jurisdiction...” This CAN provides guidance to design professionals who wish to employ this method of design in a manner consistent with the 2001 ~~1996-1997~~ AIA Guidelines, upon which these amendments were based.

ORIGINAL SIGNED	3/3/03
Kurt A. Schaefer	Date

(Additions or changes indicated by underline; deletions by strikeout)

FILE NO. 5-311.9

DATE: April 30, 1993

CODE APPLICATION NOTICE

CODE SECTION: Section 311.9, 2001 ~~1998~~ California Plumbing Code

Drainage piping over operating and delivery rooms, nurseries, food preparation centers, food-serving facilities, food storage areas, and other sensitive areas shall be kept to a minimum and shall not be exposed. Special precautions shall be taken to protect these areas from possible leakage from necessary overhead drainage piping systems. Piping over switchboards, panel boards, and motor control centers are subject to restrictions of the California Electrical Code where applicable.

INTERPRETATION:

Sanitary and storm drainage piping over operating rooms, delivery rooms, cesarean rooms, recovery rooms, nurseries, intensive care units, food preparation centers, food serving facilities, food storage areas, shall be kept to a minimum and shall not be exposed. When it becomes necessary to route this piping above the ceiling of these rooms, special precautions shall be taken to protect these areas from possible leakage. This Code Application Notice is not intended to address piping over electrical rooms, which is regulated by Section 110-26(f) 384-4, 2001 1998 California Electrical Code, and is not permitted even if the special precautions identified in this Code Application Notice are provided.

1. Acceptable "special precautions" for hubless cast iron pipe include; but are not limited to, the following:
 - (a) The use of couplings which have been tested and certified to conform to the performance requirements of Factory Mutual, Approval Standard 1680, Class I, by Factory Mutual Research or by a nationally recognized independent testing agency. The coupling shall be installed in accordance with the manufacturer's recommendations.
 - (b) "Heavy Duty" (ie, four-band type) couplings which have been listed by International Association of Plumbing and Mechanical Officials (IAPMO) for conformance to PS 35-89 or PS 35-91 or by Cast Iron Soil Pipe Institute (CISPI) for conformance to CISPI 310-90, but which have not been tested to FM 1680, Class I, may be installed when restrained to prevent joint separation. Such restraint shall be by means of pipe clamps on each side of the joint with not less than two tie rods across the joint (installed similar to SMACNA Guidelines for Seismic Restraint, 1998 Edition, fig. 9-10 and/or CISPI 310-90, fig. 4).
 - (c) Continuous sheet metal drain troughs under overhead hubless piping. Such troughs shall be sloped to drain with a properly identified air gap termination over an approved receptor.

(Additions or changes indicated by underline; deletions by strikeout)

- 2. For copper drainage tubing (DWV), an acceptable "special precaution" is the use of brazed joints on all piping which is routed above the ceiling.
- 3. Other proposed methods of compliance will be reviewed on a case by case basis.

REASON:

The code does not define what constitutes a "special precaution". Factory Mutual Research Corporation is a Nationally Recognized Testing Laboratory. Approval Standard Class Number 1680 is used to evaluate couplings used in drain, waste, vent, storm and sanitary systems for "their intended application of long term connection of hubless cast iron soil pipe both above and below ground". The types of tests performed are: hydrostatic strength, blockage, bending moment, deflection angle, sealing sleeve, clamp strength, thrust test, and salt spray.

Clamps with tie rods are a means of preventing movement in the longitudinal direction. Preventing longitudinal separation of the joint maintains maximum surface contact of the sealing sleeve which affords a factor of safety deemed an acceptable "special precaution."

For copper tubing, brazed joints provide greater strength than soldered (sweated) joints due to better bonding with the base metal and due to strength of the filler material. The greater joint strength provided by brazing is an acceptable special precaution.

The use of drain troughs under overhead piping in critical areas has been used as a "special precaution" on a case-by-case basis for many years with satisfactory results.

The interpretation provides staff and industry with "special precautions" which meet the intent of the code.

ORIGINAL SIGNED	4/3/03
Kurt A. Schaefer	Date

(Additions or changes indicated by underline; deletions by strikeout)

FILE NO. 9-1001

DATE: August 23, 1996

CODE APPLICATION NOTICE

9-1001 Fire-Protection Systems and Equipment

SUBJECT

APPROVAL DATE

Voltage Drop and Testing

September 21, 2004

Fire Alarm System Plans and Specifications

August 25, 2004

VOLTAGE DROP AND TESTING

CODE SECTION: Section 1001.3, Plans for Fire Alarm Systems, and Section 1001.4, Approval and Installation Acceptance Testing, 1995 2001 California Fire Code, Part 9, Title 24, CCR

1001.3 Plans for Fire Alarm Systems. Complete plans and specifications for fire alarm systems; fire-extinguishing systems, including automatic sprinklers standpipe systems; clean agent systems and other special types of automatic fire-extinguishing systems; and other fire-protection systems and appurtenances thereto shall be submitted to the fire department for review and approval prior to system installation. Plans and specifications for fire alarm systems shall include, but not be limited to, a floor plan; location of all alarm-initiating and alarm-signaling devices; alarm control- and trouble-signaling equipment; annunciation; power connection; battery calculations; conductor type and sizes; voltage drop calculations; and manufacturer, model numbers and listing information for all equipment, devices and materials, ~~for SFM~~ and ~~State Fire Marshal~~ listing number of all equipment, devices and materials requiring listing.

1001.4 Approval and Installation Acceptance Testing. Fire alarm systems; fire hydrant systems; fire-extinguishing systems, ~~including automatic sprinklers and wet and dry standpipes; halon systems and other special types of automatic fire-extinguishing systems; basement pipe inlets;~~ and other fire-protection systems and appurtenances thereto shall meet the approval of the fire department as to installation and location and shall be subject to such periodic acceptance tests as required by the chief. ~~See Appendix III-C.~~

Condition of ~~approval~~ acceptance of halon and clean agent systems shall be satisfactory passage of a test conducted in accordance with nationally recognized standards prior to final acceptance of the system.

Fire alarm and detection systems shall be tested in accordance with ~~U.F.C. Standard 10-4 and nationally recognized standards~~ [For SFM] NFPA 72 as amended in Article 91 and California Code of Regulations Title 19.

See Section 9003, Standard n2.8,n2.9,n2.10,n2.11,n2.12.

INTERPRETATION:

All fire alarm ~~shop~~ drawings submitted for approval shall include calculations ~~intended to demonstrate~~ demonstrating that the voltage drop due to line loss of each notification appliance circuit(s) does not exceed the following level:

1. Ten percent (10%) of the nominal Fire Alarm Control Unit operating voltage as shown on the manufacturer's catalog cut sheets and/or listed installation instructions.

OR

2. The lowest level of notification appliance manufacturer's listed nameplate voltage range, as calculated from the nominal Fire Alarm Control Unit operating voltage.

In addition to the above calculations, as a portion of the field inspection of the fire alarm system installation, the contractor shall demonstrate to the inspector that any or all affected notification appliance circuits as installed meet the above criteria. The test method for such demonstration shall include the following steps:

1. Using a volt-ohm meter set to read the voltage being applied, measure the output voltage of the notification appliance circuit to be tested at the notification circuit power source.
2. Remove from its mounting the end of line notification appliance. All appliance wiring and the end of line devices are to remain intact throughout the test procedure.
3. Activate the fire alarm system to cause the notification appliance circuit to operate.
4. Using a volt-ohm meter, measure the actual voltage being applied to the end of line device during operation of the circuit.
5. Compare the measured voltage to the manufacturer's nameplate voltage. The measured voltage shall not be below the lowest voltage range as printed on the device nameplate. If the output voltage, as measured at the circuit's power source is greater than 24 volts, that difference shall be added to the lowest nameplate voltage of the device and the actual voltage measured at the device shall not be lower than that voltage. Any circuit(s) failing such field tests shall be reevaluated, repaired, and retested prior to acceptance of the system.

REASON:

Individual notification appliances are approved and listed by the California State Fire Marshal for a range of operating voltages. However, excessive voltage drops in the notification appliance circuits may cause both audible and visible devices to function outside the required performance parameters of the ~~1995~~ 2001 California Building Code, Part 2, Title 24 and the ~~1995~~ 2001 California Fire Code, Part 9, Title 24.

Low voltage to audible notification devices will cause the device to operate below the minimum decibel levels outlined in Chapter 35, ~~1995~~ 2001 California Building Code, Part 2, Title 24. Low voltage to visible notification devices will cause the device to operate below the minimum flash rate parameters.

ORIGINAL SIGNED

9/21/04

Kurt A. Schaefer

Date

FIRE ALARM SYSTEM PLANS AND SPECIFICATIONS

CODE SECTION: Section 1001.3, Plans for Fire Alarm Systems, 1995 2001 California Fire Code, Part 9, Title 24

1001.3 Plans for Fire Alarm Systems. Complete plans and specifications for fire alarm systems; fire-extinguishing systems, including automatic sprinklers standpipe systems; clean agent systems and other special types of automatic fire-extinguishing systems; and other fire-protection systems and appurtenances thereto shall be submitted to the fire department for review and approval prior to system installation. Plans and specifications for fire alarm systems shall include, but not be limited to, a floor plan; location of all alarm-initiating and alarm-signaling devices; alarm control- and trouble-signaling equipment; annunciation; power connection; battery calculations; conductor type and sizes; voltage drop calculations; and manufacturer, model numbers and listing information for all equipment, devices and materials, ~~for SFM~~ and ~~State Fire Marshal~~ listing number of all equipment, devices and materials requiring listing.

INTERPRETATION:

All fire alarm system submittals shall include all of the following information submitted as a package. This shall apply whether the information is submitted with architectural drawings or as a deferred approval item after general plan review.

1. Scope of project
2. Floor plan showing fire alarm devices
3. Riser diagram
4. Point to point diagram
5. California State Fire Marshal listing sheet showing expiration date for all components
6. Manufacturer's specification sheet on all fire alarm equipment
7. O.S.H.P.D. Project number
8. Battery calculation or recalculation
9. Voltage drop calculation or recalculation
10. Accurate legend of symbols for all fire alarm devices being installed
11. Elevation detail of manual pull station installation
12. Elevation detail of visual alarm signaling devices
13. Location of fire/smoke barrier walls on floor plan
14. Identification of type of wiring used, including gauge and wire counts
15. Design number and detail of through penetration firestop system
16. Floor plan showing room identification/use
17. Details on support and anchorage of any fire alarm equipment weighing over 20 pounds
18. Sequence of operation/events when alarm system is activated

REASON:

The Section requires the submittal of complete plans and specification for review and approval prior to fire alarm system alterations or installation. This section also specifies, in part, the information necessary to evaluate and approve submitted plans.

This interpretation clarifies the minimum information required by this office to adequately review and evaluate fire alarm submittals. Designers are encouraged to include the minimum 15 item list in either the project specification or on the cover sheet of plan submittals.

ORIGINAL SIGNED	8/25/04
Kurt A. Schaefer	Date

FILE NO. 9-8705.4

DATE: March 2, 1993

CODE APPLICATION NOTICE

CODE SECTION: Section 8705.4, ~~1998~~ 2001 California Fire Code**8705.4. Fire-resistive Assemblies and Construction.** Fire-resistive assemblies and construction shall be maintained in accordance with Section 1111. (Maintenance of Fire-resistive Construction)**INTERPRETATION:**

In occupied buildings, where temporary construction barriers are required to be installed during the construction or reconstruction of fire-resistive assemblies, temporary construction shall meet the same fire rating as would the permanent partition. Use of plastic or vinyl dust barriers in lieu of fire rated separations ~~are~~ is prohibited. Temporary construction barriers are not required where adequate fire-resistive separation can be demonstrated to exist between occupied areas and construction areas.

Where construction barriers affect any exit component, pre-approval shall be obtained from the local fire jurisdiction and the OSHPD Fire Marshal prior to any demolition or reconstruction.

REASON:

While recognizing the need for construction barriers, the first objective is to ensure the safety of the patients. Dust membranes do not afford any level of fire protection or fire-rated separation to areas remaining occupied during construction. Exit corridors, exit stairs, area separation walls, smoke barriers, etc. are all primary building features designed and installed to produce a "defend in place" and an "area of refuge" as required by the California Building Code for "I" Occupancies. Thus, it is essential that separation be maintained between construction areas and occupied portions of the building.

ORIGINAL SIGNED

8/25/04

Kurt A. Schaefer

Date

REVISION: August 18, 2004