

REVISION RECORD FOR THE STATE OF CALIFORNIA

EMERGENCY SUPPLEMENT

January 1, 2008

2007 Title 24, Part 1, California Building Standards Administrative Code

**PLEASE NOTE: The date of this Emergency Supplement is for identification purposes only.
See the History Note Appendix for the adoption and effective dates of the provisions.**

It is suggested that the section number as well as the page number be checked when inserting this material and removing the superseded material. In case of doubt, rely on the section numbers rather than the page numbers because the section numbers must run consecutively.

It is further suggested that the material be retained with this revision record sheet so that the prior wording of any section can be easily ascertained.

Please keep the removed pages with this revision page for future reference.

Note

Due to the fact that the application date for a building permit establishes the California Building Standards Code provisions that are effective at the local level, which apply to the plans, specifications, and construction for that permit, it is strongly recommended that the removed pages be retained for historical reference.

Remove Existing Pages

57 through 64
73 through 80
85 and 86
93 through 98
107 through 116
135 through 138
141 and 142

Insert Blue Pages

57 through 64
73 through 80
85 and 86
93 through 98
107 through 116
135 through 138
141 and 142

CHAPTER 6

SEISMIC EVALUATION PROCEDURES FOR HOSPITAL BUILDINGS

ADMINISTRATIVE REGULATIONS FOR THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT (OSHPD)

ARTICLE 1 DEFINITIONS AND REQUIREMENTS

1.0 Scope. The regulations in this article shall apply to the administrative procedures necessary to implement the seismic retrofit requirements of the Alfred E. Alquist Hospital Facilities Seismic Safety Act of 1983.

1.1 Application. The regulations shall apply to all general acute care hospital facilities as defined in Section 1.2 of these regulations.

1.2 Definitions. Unless otherwise stated, the words and phrases defined in this section shall have the meaning stated therein throughout Chapter 6, Part 1, Title 24.

ALTERNATIVE ANALYSIS means a complete seismic analysis using methodology approved in advance by the Office and meeting the criteria of Article 2, Section 2.7 of these regulations.

BULK MEDICAL GAS SYSTEM means an assembly of fixed equipment such as storage containers, pressure regulators, pressure relief devices, vaporizers, manifolds and inter-connecting piping that has a capacity of more than 20,000 cubic feet (NTP) of cryogenic medical gas.

COMMUNICATIONS SYSTEM means the assembly of equipment such as telephone switchgear, computers, batteries, radios, microwave communications systems, towers and antennas that provide essential internal and external communication links.

CONFORMING BUILDING means a building originally constructed in compliance with the requirements of the 1973 or subsequent edition of the *California Building Code*.

CRITICAL CARE AREA means those special care units, intensive care units, coronary care units, angiography laboratories, cardiac catheterization laboratories, delivery rooms, emergency rooms, operating rooms, postoperative recovery rooms and similar areas in which patients are intended to be subjected to invasive procedures and connected to line-operated, electromedical devices.

EMERGENCY POWER SUPPLY (EPS) means the source of electric power including all related electrical and mechanical components of the proper size or capacity, or both, required for the generation of the required electrical power at the EPS output terminals. For rotary energy converters, components of an EPS include the prime mover, cooling system, generator, excitation system, starting system, control system, fuel system and lube system (if required).

ESSENTIAL ELECTRICAL SYSTEMS means a system as defined in the *California Electrical Code*, Article 517 "Health Care Facilities," Chapter 5, Part 3 of Title 24.

FIRE ALARM SYSTEM means a system or portion of a combination system consisting of components and circuits

arranged to monitor and announce the status of fire alarm or supervisory signal initiating devices and to initiate appropriate response to those signals.

FUNCTIONAL CONTIGUOUS GROUPING means a group of hospital buildings, each of which contains the primary source of one or more basic service that are operationally inter-connected in a manner acceptable to the Department of Health Services.

GENERAL ACUTE CARE HOSPITAL as used in Chapter 6, Part 1 means a hospital building as defined in Section 129725 of the Health and Safety Code and that is also licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, but does not include these buildings if the beds licensed pursuant to subdivision (a) of Section 1250 of the Health and Safety Code, as of January 1, 1995, comprise 10 percent or less of the total licensed beds of the total physical plant, and does not include facilities owned or operated, or both, by the Department of Corrections. It also precludes hospital buildings that may be licensed under the above mentioned code sections, but provide skilled nursing or acute psychiatric services only.

HOSPITAL EQUIPMENT means equipment permanently attached to the building utility services such as surgical, morgue, and recovery room fixtures, radiology equipment, medical gas containers, food service fixtures, essential laboratory equipment, TV supports, etc.

HYBRID STRUCTURE means a structure consisting of an original and one or more additions, constructed at different times, and with lateral-force-resisting systems of different types, or constructed with differing materials or a different design approach. The original building and additions are inter-connected and not seismically isolated.

NONCONFORMING BUILDING means any building that is not a conforming building.

NONSTRUCTURAL PERFORMANCE CATEGORY (NPC) means a measure of the probable seismic performance of building contents and nonstructural systems critical to providing basic services to inpatients and the public following an earthquake, as defined in Article 11, Table 11.1 of these regulations.

PRIMARY SOURCE means that building or portion of a building identified by the hospital as housing the main or principal source of a basic hospital service, serving the greatest number of patients, providing the greatest number of patient beds, or having the largest/greatest floor space of the specified basic service. The hospital may submit data to substantiate the primary source through alternative criteria if different than above.

PRINCIPAL HORIZONTAL DIRECTIONS means the two predominant orthogonal translational modes of vibration with the lowest frequency.

SLENDER SEISMIC RESISTING SYSTEM means any vertical system for resisting lateral forces, such as walls, braced frames or moment frames, with a height to width ratio greater than four for the minimum horizontal dimension at any height.

STRUCTURAL PERFORMANCE CATEGORY (SPC) means a measure of the probable seismic performance of building structural systems and risk to life posed by a building subject to an earthquake, as defined in Article 2, Table 2.5.3 of these regulations.

1.3 Seismic evaluation. All general acute care hospital owners shall perform a seismic evaluation on each hospital building in accordance with the Seismic Evaluation Procedures as specified in Articles 2 through 11 of these regulations. By January 1, 2001, hospital owners shall submit the results of the seismic evaluation to the Office for review and approval. By completing this seismic evaluation, a hospital facility can determine its respective seismic performance categories for both the Structural Performance Category (SPC) and the Nonstructural Performance Category (NPC) in accordance with Articles 2 and 11 of these regulations.

1.3.1 Seismic evaluation submittal. Hospital owners shall submit the seismic evaluation report to the Office by January 1, 2001. There are no provisions for submittal of the evaluation report after this date. The hospital owners shall submit the evaluation report in accordance with Section 7-113, "Application for Plan Report or Seismic Compliance Extension Review" and Section 7-133, "Fees" of Article 3, Chapter 7, Part 1, Title 24.

Exceptions:

1. Any hospital facility owner whose building is exempted from the structural evaluation per Section 2.0.1.2 shall not be required to submit a structural evaluation report as specified in Section 1.3.3. In lieu of the structural evaluation report, hospital owners shall submit the matrix of construction information for the specified building(s) as noted in Section 1.3.4.6 to the Office by January 1, 2001;
2. Any hospital facility owner whose building is exempted from the nonstructural seismic evaluation per Section 11.0.1.2 shall not be required to submit a nonstructural evaluation report as specified in Section 1.3.4. In lieu of the nonstructural evaluation report, hospital owners shall submit the matrix of construction information for the specified building(s) as noted in Section 1.3.4.6 to the Office by January 1, 2001.

1.3.2 Seismic evaluation format. The evaluation shall consist of the Structural Evaluation and the Nonstructural Evaluation Reports. The reports shall be prepared in conformance with Part 1, Chapter 7, Title 24 and these regulations and prepared as follows:

1. Reports shall be submitted in an 8¹/₂" x 11" format;
2. All site, architectural, and engineering plans shall be formatted on 11- by 17-inch sheets (folded to 8¹/₂ by 11 inches);

3. Larger sheets, if required to clearly describe the requested information, shall be appended to the reports; and
4. Other supporting documents in addition to those meeting the minimum requirements of Sections 1.3.3 and 1.3.4 may be appended to the reports.

1.3.3 Structural evaluation report. The structural evaluation report shall include the following elements:

1. A description of the building, including photographs of the building, and sketches of the lateral force resisting system;
2. The "General Sets of Evaluation Statements" from the Appendix;
3. A synopsis of the investigation and supporting calculations that were made;
4. A list of the deficiencies requiring remediation to change statement responses from false to true; and
5. The SPC for the building, with comments on the relative importance of the deficiencies.

1.3.4 Nonstructural evaluation report. The nonstructural evaluation report shall include the following elements:

1. A written description of the evaluation methods and procedures conducted in conformance with Article 11 of these regulations for the determination of the facilities existing compliance. The description shall include the systems and components required for the planned level of nonstructural performance as identified in Table 11.1;

Exceptions:

1. Additional evaluations as per Section 11.01.3 will be required for any hospital owner electing to obtain a higher NPC at a future date consistent with an approved compliance plan;
 2. A complete nonstructural evaluation up to NPC 5 is required prior to the hospital owner selling or leasing the hospital to another party.
2. Provide single line diagrammatic plans (site plan and floor plans) of the following:
 - 2.1 Location of the following areas/spaces:
 - (a) Central supply areas;
 - (b) Clinical laboratory service spaces;
 - (c) Critical care areas;
 - (d) Pharmaceutical service spaces;
 - (e) Radiological service spaces; and
 - (f) Sterile supply areas.
 - 2.2 Diagrammatic or narrative descriptions of the following major building systems where deficiencies are identified that are within the scope of the evaluation, including primary source location or point(s) of entry into the building and major distribution routes of each utility or system.
 - (a) Mechanical systems including:
 - i. Air supply equipment, piping, controls and ducting;

- ii. Air exhaust equipment and ducting;
 - iii. Steam and hot water piping systems, including boilers, piping systems, valving and components; and
 - iv. Elevators selected to provide service to patient, surgical, obstetrical and ground floors.
- (b) Plumbing systems including:
- i. Domestic water supply system, including heating equipment, valving, storage facilities and piping;
 - ii. Medical gas supply system, including storage facilities, manifolding and piping;
 - iii. Fire protection system, including sprinkler systems, wet and dry standpipes, piping systems and other fire suppression systems; and
 - iv. Sanitary drainage system, including storage facilities and piping.
- (c) Electrical systems, including:
- i. Essential electrical system, including emergency fuel storage;
 - ii. Internal communication systems;
 - iii. External communication systems;
 - iv. Fire alarm systems; and
 - v. Elevators selected to provide service to patient, surgical, obstetrical and ground floors.
3. A synopsis of the evaluation and all the calculations used in the course of the evaluation for the planned level of nonstructural performance;
 4. A list of the deficiencies identified in the course of the evaluation for the planned level of nonstructural performance;
 5. Provide an 11- by 17-inch scaled Site Plan which identifies the boundaries of the facility property, locates all buildings, roadways, parking and other significant site features and improvements. Identify boundaries between buildings which were constructed at different times. For all buildings, note the names of the buildings and date of each related building permit. Provide the SPC and NPC for all buildings.

6. Provide the following matrix of construction information for each building of the facility under the acute care license, include the Structural Performance Category (SPC) and Nonstructural Performance Category (NPC) for all hospital buildings (see Tables 2.5.3 and 11.1). Identify each building addition separately. For buildings constructed, reconstructed or remodeled under a building permit issued by the Office, provide the OSHPD application number and the date of the initial submittal.

1.4 Compliance plans. A compliance plan shall be prepared and submitted for each building subject to these regulations. All general acute care hospital owners shall formulate a compliance plan which shall indicate the facilities intent to do any of the following:

1. Building retrofit for compliance with these regulations for continued acute care operation beyond 2030;
2. Partial retrofit for initial compliance, with closure or replacement expected by 2002, 2008, 2013 or 2030;
3. Removal from acute care service with conversion to nonacute care health facility use; or
4. No action, building to be closed, demolished or replaced.

This plan must clearly indicate the actions to be taken by the facility and must be in accordance with the timeframes set forth in Article 2 (Structural Performance Category-“SPC”) and Article 11 (Nonstructural Performance Category-“NPC”) of the Seismic Evaluation Procedure regulations.

1.4.1 Preparation of the compliance plan. The Compliance Plan shall be prepared and submitted in conformance with these regulations in the following format:

1. Compliance Plans shall be submitted in an 8¹/₂- by 11-inch format;
2. All site, architectural, and engineering plans shall be formatted on 11- by 17-inch sheets (folded to 8¹/₂ by 11 inches);
3. Larger sheets, if required to clearly describe the requested information, shall be appended to the compliance plan; and
4. Other supporting documents in addition to those meeting the minimum requirements of Section 1.4.4 may be appended to the compliance plan.

1.4.2 Compliance plan submittal. Hospital owners shall submit the compliance plan to the Office by January 1, 2001, unless the owner requests an extension pursuant to Section 1.4.3. The hospital owners shall submit the compliance plan in accordance with Section 7-113, “Application for Plan or Report Review” and Section 7-133, “Fees” of Article 3, Chapter 7, Part 1, Title 24.

1.4.3 Compliance plan submittal extension. Hospital owners may request an extension from the Office for submission of the compliance plan. Any hospital owner requesting an extension for submittal of the compliance plan shall make such request in writing to the Office up to 180 days prior to, but no later than January 1, 2001. The compliance plan must be submitted no later than January 1, 2002. All hospital owners requesting an extension for submittal of the compliance plan shall certify to

Building name/designation	OSHPD (or local building) permit date/number	Governing building code	Construction completion date	Building type (per Section 2.2.3)	SPC	NPC

OSHPD that all hospital buildings continuing acute care operation beyond January 1, 2002 meet the standards of NPC 2 by January 1, 2002.

1.4.4 Compliance plan requirements. Each compliance plan shall contain the following elements:

1. An Existing Site/Campus Description;
2. A Compliance Plan Description;
3. A Compliance Site Plan;
4. A Compliance Plan Schedule; and
5. An Existing and Planned Buildings Matrix.

1.4.4.1 Existing site/campus description. If the compliance plan is submitted separately from the seismic evaluation, it will be necessary to resubmit the information as specified in Section 1.3.4.5, of the Nonstructural Evaluation Report.

1.4.4.2 Compliance plan description. Provide a comprehensive narrative description of the Compliance Plan, including the projected schedule for compliance.

1.4.4.3 Compliance site plan. Provide Compliance Site Plans, indicating the configuration of the facility at the 2008 and 2030 milestones. The plans shall indicate conforming and nonconforming buildings and identify the final configuration of the facility at each milestone, after completion of compliance measures.

1.4.4.4 Compliance plan schedule. Provide a bar graph schedule which describes the schedule for compliance with the SPC and NPC seismic performance categories, indicating the schedule of the following major phases of the plan:

1. Obtain a geotechnical report (if necessary);
2. Architecture and engineering design/construction document preparation;
3. Local approvals;
4. Office review, approval and permitting;
5. Approval of Department of Health Services Licensing and Certification, and any other required licensing;
6. Permanent relocation of acute care services to other buildings or facilities (identify services affected);
7. Temporary/interim relocation of acute care services to other buildings including the duration of the approved program flexibility plan pursuant to Health and Safety Code Section 1276.05;
8. Construction period; and
9. Beneficial occupancy.

1.4.4.5 Existing and planned buildings matrix. Provide the following matrix of construction information for each building of the facility under the acute care license, include the Structural Performance Category (SPC) and Nonstructural Performance

Building name/designation	Building type (per Section 2.2.3)	SPC existing	SPC planned	NPC existing	NPC planned

Category (NPC) for all hospital buildings (see Tables 2.5.3 and 11.1). Identify each building addition separately.

1.4.5 Compliance plan update/change notification. Should a hospital owner change an approved Compliance Plan, the hospital shall document any changes and submit for review and approval to the Office an amended Compliance Plan. Changes are defined as alterations to the planned level of seismic performance or compliance schedule. Submittal of an amended compliance plan shall require a hospital owner to comply with one or more of the following provisions, if applicable:

1. A hospital owner shall submit to the Department of Health Services' Seismic Safety Unit (DHS) an Office-approved compliance plan that includes interim relocation of general acute care services in accordance with a program flexibility plan pursuant to Health and Safety Code Section 1276.05. This submittal by the hospital owner to DHS shall occur within 30 days of the Office's approval.
2. A hospital owner shall comply with the requirements of Section 1.5.2, "Delay in Compliance" for any amended compliance plan.
3. A hospital owner amending a compliance plan to attain a higher NPC level will perform a nonstructural evaluation of the systems and components required for the planned level of nonstructural performance identified in Table 11.1, "Nonstructural Performance Categories."

1.4.5.1 Change in seismic performance category. The SPC or NPC for a hospital building may be changed by the Office from the initial determination in Section 1.3.3 or 1.3.4, provided the building has been modified to comply with the requirements of Chapter 34A, Part 2 of Title 24 for the specified SPC or NPC.

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 34A, Part 2 of Title 24 for the specified SPC or NPC.

1.4.5.1.2 Except as provided in Section 1.4.5.1.3, a nonconforming hospital building that does not meet the structural and nonstructural requirements of Table 2.5.3 and Table 11-1 shall not provide acute care services or beds after the compliance deadlines set forth in Section 1.5.1. After these deadlines, the following shall apply.

1. A nonconforming hospital building used as a hospital outpatient clinical services building shall not be classified as a hospital building. It shall comply with the provisions of Health and Safety Code Section 129725. It shall not be subject to the requirements of Title 24, Part 1, Chapter 6.
2. A nonconforming hospital building used as an acute psychiatric hospital or multistory skilled nursing facility or intermediate care facility shall be classified as a hospital building. However, it shall not be subject to the requirements of Title 24, Part 1, Chapter 6.
3. A nonconforming hospital building used as a single-story wood frame or light steel frame skilled nursing facility or intermediate care facility shall not be classified as a hospital building, and shall not be subject to the requirements of Title 24, Part 1, Chapter 6.
4. A nonconforming hospital building used for purposes other than those listed above shall not be classified as a hospital building; shall not be licensed pursuant to Health and Safety Code Section 1250(a); shall not be subject to the requirements of Title 24, Part 1, Chapter 6; and shall not be under the jurisdiction of the Office.

1.4.5.1.3 A hospital building from which acute care services and beds have been removed shall not provide such services unless it has been modified to comply with the requirements of SPC 5 and NPC 4 or 5. Prior to use for acute care service, the SPC and/or NPC of the hospital building shall be changed in accordance with Section 1.4.5.1.1.

1.5 Compliance requirements. All general acute care hospital owners shall comply with the seismic performance categories, both SPCs and NPCs, established in the seismic evaluation procedures, Articles 2 and 11 and set forth in Tables 2.5.3 and 11.1, respectively.

1.5.1 Compliance deadlines.

1. After January 1, 2002, any general acute care hospital building which continues acute care operation must, at a minimum, meet the nonstructural requirements of NPC 2, as defined in Article 11, Table 11.1 or shall no longer provide acute care services.
2. After January 1, 2008, any general acute care hospital building which continues acute care operation must, at a minimum, meet the structural requirements of SPC 2, as defined in Article 2, Table 2.5.3 or shall no longer provide acute care services.

Exception: A general acute care hospital may request a delay of SPC 2 requirements if the conditions of Section 1.5.2 are met.

3. After January 1, 2008, any general acute care hospital which continues acute care operation must, at a minimum, meet the nonstructural requirements of NPC 3, as defined in Article 11, Table 11.1 or shall no longer provide acute care services.

Exception: A general acute care hospital may request an exemption from the anchorage and bracing requirements of NPC 3 if all the conditions of Section 1.5.2, Item 2, are met.

4. After January 1, 2030, any general acute care hospital building which continues acute care operation must, at a minimum, meet the structural requirements of SPC 3, 4 or 5, as defined in Article 2, Table 2.5.3 and the nonstructural requirements of NPC 5, as defined in Article 11, Table 11.1 or shall no longer provide acute care services.

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 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.

2. Any general acute care hospital located in Seismic Zone 3, as defined by Section 1627B.2 of the 1998 *California Building Code*, may request an exemption from the anchorage and bracing requirements of NPC 3 if all the following conditions are met:

- 2.1 The hospital must meet the anchorage and bracing requirements for NPC 2 by January 1, 2002;

- 2.2 The hospital shall submit a site-specific engineering geologic report, prepared in accordance with Section 1634A.1 of the 1995 *California Building Code*. The report shall include estimates of the effective peak ground acceleration (EPA) with a 10 percent probability of exceedance in 50 years;

- 2.3 The California Geological Survey (CGS) reviews and approves the findings of the site-specific engineering geologic report;

- 2.4 The site-specific engineering geologic report demonstrates that the estimated EPA with a 10 percent probability of exceedance in 50 years is less than 0.25 g;

11

- 2.5 The hospital owner requesting the exemption shall pay the actual costs of OSHPD and CGS for the review and approval of the site-specific engineering geologic report.
3. Any SPC-1 building which is part of the functional contiguous grouping of a general acute care hospital may receive a five-year extension to the January 1, 2008 deadline for both structural and nonstructural requirements under the following conditions:
- 3.1 The owner must apply for an extension with the Office no later than January 1, 2004;
- 3.2 The owner must submit an amended compliance plan to the Office by July 1, 2004;
- 3.3 The buildings must have met the NPC-2 nonstructural requirements by January 1, 2002;
- 3.4 At least one building within the contiguous grouping shall have obtained a building permit prior to 1973 and shall have been evaluated and classified as SPC-1 in accordance with Section 1.3;
- Exception:** Hospital buildings that were classified as SPC-1 under Section 2.0.1.2.3 must submit a structural evaluation report in accordance with Sections 1.3.2 and 1.3.3 by January 1, 2004.
- 3.5 The basic service(s) from the building shall be:
- (a) Relocated to an SPC-3, 4, or 5/NPC-4 or 5 building by January 1, 2013.
- i. The building shall not be used for general acute care service after January 1, 2013, unless it has been retrofitted to an SPC-5/NPC-4 or 5 building; or
- (b) Continued in building if it is retrofitted to an SPC-5/NPC-4 or 5 building by January 1, 2013;
- 3.6 Any other SPC-1 building in the contiguous grouping other than the building identified in subsection 1.5.2.3.4 must be retrofitted to at least an SPC-2/NPC-3 by January 1, 2013, or no longer used for acute care hospital inpatient services.
4. A post-1973 building classified as SPC-3 or 4 may receive an extension to the January 1, 2008, deadline for both the structural and nonstructural requirements, provided it will be closed to general acute care inpatient service by January 1, 2013. The basic services in this building shall be relocated to an SPC-5/NPC-4 or 5 building by January 1, 2013;
- 4.1 Any SPC-1 building in a functional contiguous grouping must be retrofitted to at least an SPC-2/NPC-3 by January 1, 2013, or no longer used for acute care hospital inpatient services. The following conditions apply to these hospital buildings:
- (a) The owner must apply for an extension with the Office no later than January 1, 2004;
- (b) The owner must submit an amended compliance plan to the Office by July 1, 2004; and

- (c) The buildings must have met the NPC-2 nonstructural requirements by January 1, 2002.

5. A single building containing all of the basic services may receive a five-year extension to the January 1, 2008, deadline for both structural and nonstructural requirements under the following conditions:

- 5.1 The owner must apply for an extension with the Office no later than January 1, 2004;
- 5.2 The owner must submit an amended compliance plan to the Office by July 1, 2004;
- 5.3 The building shall have obtained a building permit prior to 1973 and shall have been evaluated and classified as SPC-1 in accordance with Section 1.3;

Exception: Hospital buildings that were classified as SPC-1 under Section 2.0.1.2.3 must submit a structural evaluation report in accordance with Sections 1.3.2 and 1.3.3 by January 1, 2004.

- 5.4 The basic services from this building shall be:
- (a) Relocated to an SPC-3, 4, or 5/NPC-4 or 5 building by January 1, 2013.
- i. The building shall not be used for general acute care service after January 1, 2013, unless it has been retrofitted to an SPC-5/NPC-4 or 5 building; or
- (b) Continued in building if it is retrofitted to an SPC-5/NPC-4 or 5 building by January 1, 2013.

1.6 Dispute resolution/appeals process. Dispute resolution and appeals shall be in conformance with Article 5, Chapter 7, Part 1 of Title 24.

1.7 Notification from OSHPD.

- The Office shall issue written notices of compliance to all hospital owners that have attained the minimum required SPC and NPC performance levels by January 1, 2008, January 1, 2013, and January 1, 2030;
- The Office shall issue written notices of violation to all hospital owners that are not in compliance with the minimum SPC and NPC performance levels by January 1, 2008, January 1, 2013, and January 1, 2030; and
- The Office shall notify the State Department of Health Services of the hospital owners which have received a written notice of violation for failure to comply with these regulations.

ARTICLE 2 PROCEDURES FOR STRUCTURAL EVALUATION OF BUILDINGS

2.0 General.

2.0.1 Structural evaluation procedure.

- The structural evaluation process shall include the following steps:

- 1.1 Site visit and data collection;
 - 1.2 Identification of building type;
 - 1.3 Completion of evaluation statements in appendix;
 - 1.4 Follow-up field work, if required;
 - 1.5 Follow-up analysis for “False” evaluation statements;
 - 1.6 Final evaluation for the building;
 - 1.7 Preparation of the evaluation report; and
 - 1.8 Submittal of evaluation report to OSHPD.
2. A general acute care hospital facility building may be exempted from a structural evaluation upon submittal of a written statement by the hospital owner to OSHPD certifying the following conditions:
- 2.1 A conforming building as defined in Article 1, Section 1.2, may be placed into SPC 5 in accordance with Table 2.5.3 under the following circumstances:
 - (a) The building was designed and constructed to the 1989 or later edition of Part 2, Title 24, and
 - (b) If any portion of the structure, except for the penthouse, is of steel moment resisting frame construction (Building Type 3, or Building Type 4 or 6 with dual lateral system, as defined in Section 2.2.3) and the building permit was issued after October 25, 1994.
 - 2.2 All other conforming buildings as defined in Article 1, Section 1.2, may be placed into SPC 4 in accordance with Table 2.5.3, except those required by Section 4.2.10 to be placed in SPC 3 in accordance with Table 2.5.3, without the need for any structural evaluation.
 - 2.3 Nonconforming buildings as defined in Article 1, Section 1.2 may be placed into SPC 1 in accordance with Table 2.5.3 without any structural evaluation.

2.1 Site visit, evaluation and data collection procedures.

2.1.1 Site visit and evaluation.

1. The evaluator shall visit the building to observe and record the type, nature and physical condition of the structure.
2. The evaluator shall review an *Engineering Geological Report* on site geologic and seismic conditions. The report shall be prepared in accordance with Title 24, Section 1634A of 1995 *California Building Code* (CBC) or equivalent provision in later version of the CBC.

Exceptions:

1. Reports are not required for one-story, wood-frame and light steel-frame buildings of Type II or Type V construction and 4,000 square feet or less in floor area;
2. A previous report for a specific site may be resubmitted, provided that a reevaluation is

made and the report is found by the Office to be currently appropriate.

3. Establish the following *site and soil parameters*:
 - a. The value of the effective peak acceleration coefficient (A_a) from Figure 2.1 and 2.1a;
 - b. The value of the effective peak velocity-related acceleration coefficient (A_v) from Figure 2.1 and 2.1a;
 - c. The soil profile type (S_1 , S_2 , S_3 or S_4) derived from the geotechnical report or from Table 2.1;
 - d. The site coefficient, (S), from Table 2.1; and
 - e. The ground motion parameters and near field effects in strong ground shaking required for the evaluation of welded steel moment frame structures per Sections 4.2.0.1, 4.2.0.2 and 4.2.10.
4. Assemble building design data including:
 - a. Construction drawings, specifications and calculations for the original building (Note: when reviewing and making use of existing analyses and structural member checks, the evaluator shall assess and report the basis of the earlier work);
 - b. All drawings, specifications and calculations for remodeling work; and
 - c. Material tests and inspection reports for nonconforming buildings. If the original drawings are available, but material test and inspection reports are not available, perform the testing program as specified in Section 2.1.2.2.

If structural drawings are not available, the site visit and evaluation shall be performed as described in Section 2.1.1.5, and structural data shall be collected using the procedures in Sections 2.1.2.1 and 2.1.2.2.
5. During the site visit, the evaluator shall:
 - a. Verify existing data;
 - b. Develop other needed data (e.g., measure and sketch building as outlined in Section 2.1.2);
 - c. Verify the vertical and lateral systems;
 - d. Check the condition of the building; and
 - e. Identify special conditions, anomalies and oddities.
6. Review other data available such as assessments of building performance following past earthquakes.
7. Prepare a summary of the data using an OSHPD-approved format.
8. Perform the evaluation using the procedures in Sections 2.2 through 2.5.
9. Prepare a report of the findings of the evaluation using an OSHPD-approved format.

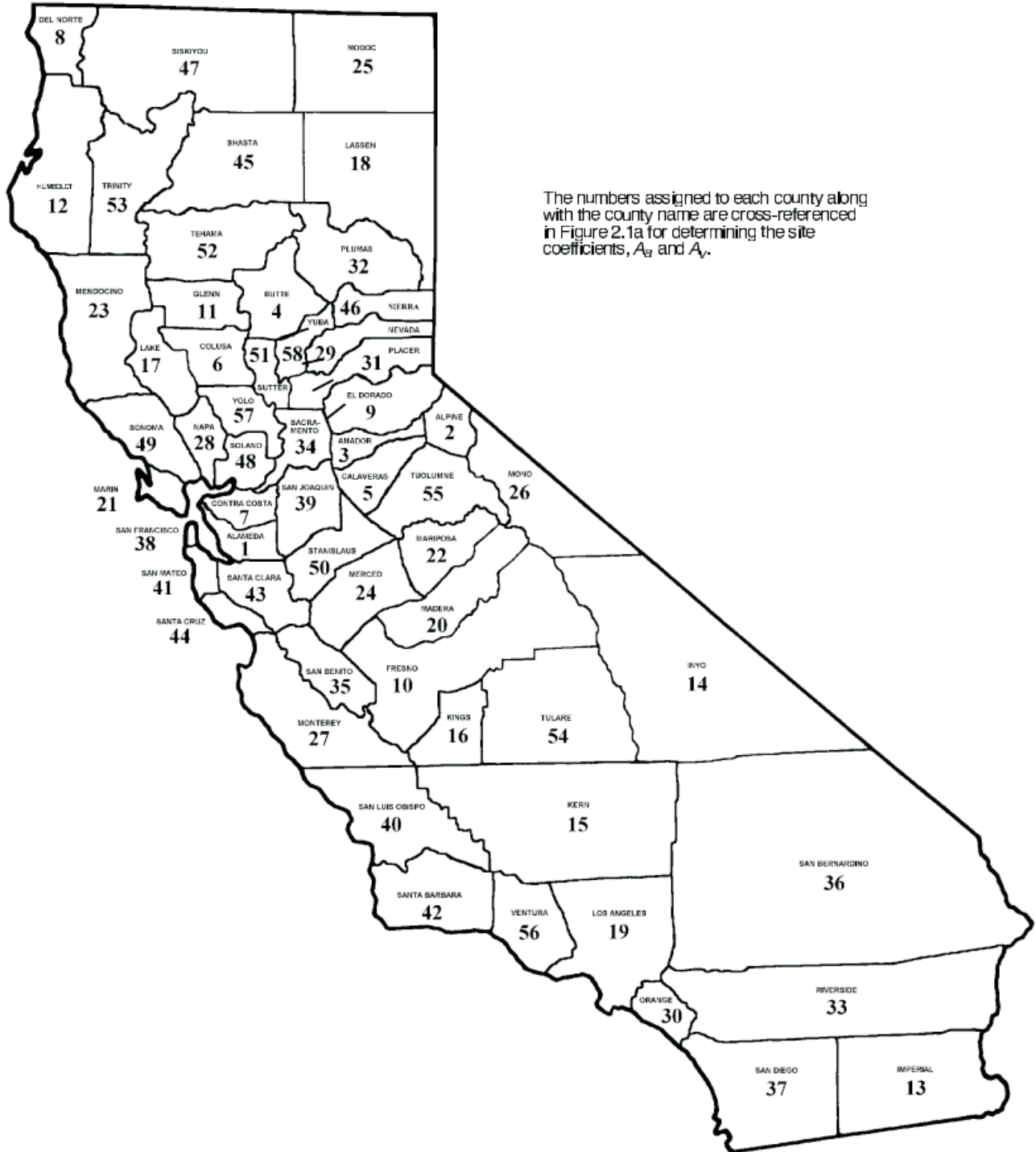


FIGURE 2.1

2.4.3.11 P-delta effects. The resulting member forces and moments and the story drifts induced by *P*-delta effects shall be considered in the evaluation of overall structural frame stability. *P*-delta need not be considered if the drift satisfies the “Quick Check for Drift” given in Section 2.4.7.

2.4.3.12 Foundations. The foundation shall be capable of transmitting the base shear and the overturning forces defined in this article from the structure into the supporting soil. The short-term dynamic nature of the loads may be taken into account in establishing the soil properties.

2.4.3.12.1 Soil capacities. The capacity of the foundation soil in bearing or the capacity of the soil interface between pile, pier or caisson and the soil shall be sufficient to support the structure with all prescribed loads, other than earthquake forces, taking due account of the settlement that the structure is capable of withstanding. For the load combination including earthquake, the soil capacities must be sufficient to resist loads at acceptable strains considering both the short time of loading and the dynamic properties of the soil. Allowable soil capacities multiplied by a factor of 2.0 may be used, except that values for sliding friction may not be increased.

2.4.3.12.2 Structural materials. The strength of concrete foundation components subjected to seismic forces alone or in combination with other prescribed loads and their detailing requirements shall be determined from the provisions of ACI 318. Reductions to foundation component capacities shall be made where components do not meet the requirements of ACI 318.

2.4.4 Deformation and drift. When deformations and drift limits need to be checked, such as for frames failing the “Quick Check of Drift” and slender seismic resisting systems of any type, compute the elastic deformations caused by the required forces and then multiply by the factor C_d to determine the total deformations. Interstory drifts shall not exceed $0.0133h_{sx}$, where h_{sx} is the story height below level x . For purposes of this drift analysis only, it is permissible to use the computed fundamental period (T) of the building without the upper bound limitation specified in Section 2.4.3.2 when determining drift level seismic design forces.

2.4.5 Demand on diaphragms. The deflection in the plane of the diaphragm shall not exceed the permissible deflection of the attached elements as determined by the evaluator. Permissible deflection permits the attached element to maintain its structural integrity under the individual loading and continue to support the prescribed loads without endangering the occupants of the building.

Floor and roof diaphragms shall be designed to resist a minimum force equal to $0.5A_v$ times the weight of the diaphragm and other elements attached to the building plus the portion of the seismic shear force at that level, (V_x), required to be transferred to the components of the vertical seismic-resisting system because of offsets or changes in stiffness of the vertical components above and below the diaphragm.

Diaphragms shall provide for both the shear and bending stresses resulting from these forces. Diaphragms shall have ties or struts to distribute the wall anchorage forces into the diaphragm as prescribed in Section 3.6.4 of the 1994 *NEHRP Recommended Provisions*.

2.4.6 Demand on parts and portions of the building. Parts and portions of structures and permanent nonstructural components and equipment supported by a structure and their attachments, as identified in the building evaluation procedures, shall be evaluated to verify that they are capable of resisting the seismic forces specified below. All attachments or appendages, including anchorages and required bracing, shall be evaluated for seismic forces. Nonrigid equipment, the structural failure of which would cause a life-safety hazard, also shall be evaluated.

Each element or component evaluated shall be capable of resisting a total lateral seismic force, F_p , where:

$$F_p = 0.67(A_v C_c W_c) \tag{2-10}$$

where:

A_v = the velocity-related acceleration coefficient given in Figures 2.1 and 2.1a.

C_c = a coefficient given in Table 2.4.6.

W_c = the weight of the element or component.

The NPC of the building shall be determined using the procedures in Article 11.

TABLE 2.4.6—SEISMIC COEFFICIENT, C_c

		C_c
Parts of structure	Walls:	
	Unbraced (cantilevered parapets and walls)	2.4
	Other exterior walls at and above the ground floor	0.9
	All interior bearing and nonbearing walls and partitions	0.9
	Masonry or concrete fences over 6 feet high	0.9
	Penthouse (except where framed by an extension of the building frame)	0.9
	Connections for prefabricated structural elements other than walls with force applied at the center of gravity	0.9
Nonstructural components	Exterior and interior ornamentations and appendages	2.4
	Chimneys, stacks, trussed towers and tanks: Supported on or projecting as an unbraced cantilever above the roof more than one-half its total height	2.4
	All others including those supported below the roof with unbraced projection above the roof less than one-half its height or braced or guyed to the structural frame at or above its center of mass	0.9
	Mechanical, plumbing and electrical equipment	0.9
	Anchorage for suspended ceilings and light fixtures	0.9

2.4.7 Quick checks of strength and stiffness. Evaluation statements may require quick check estimates of the strength and stiffness of the building.

To check the average shear stress or drift for upper stories in addition to the first story, the story shear for an upper story may be approximated as follows:

$$V_j = \left(\frac{n+j}{n+1} \right) \left(\frac{W_j}{W} \right) 1.2V \quad (2-11)$$

where:

- j = number of story level under consideration.
- n = total number of stories above ground level.
- V = base shear from Equation 2-3.
- V_j = maximum story shear at story Level j .
- W = total seismic dead load.
- W_j = total seismic dead load of all stories above Level j (see Section 2.4.1).

2.4.7.1 Story drift for moment Frames. The following equation for the drift ratio is applicable only to regular, multistory, multibay frames with columns continuous top and bottom:

$$DR = \left(\frac{k_b + k_c}{K_b \cdot K_c} \right) \left(\frac{h}{12E} \right) V_c C_d \quad (2-12)$$

where:

- C_d = deflection amplification factor from Table 2.4.3.1.
- DR = drift ratio = interstory displacement divided by interstory height.
- E = modulus of elasticity (ksi).
- h = story height (in.).
- I = moment of inertia (in.⁴).
- k_b = I/L for the beam.
- k_c = I/h for the column.
- L = center-to-center length (in.).
- V_c = shear in the column (kips).

For reinforced concrete frames, use appropriate cracked section properties pursuant to ACI 318-95 or later. For other configurations of frames, compute the drift ratio from the principles of structural mechanics.

2.4.7.2 Shearing stress in concrete frame columns. The equation for a quick estimate of the average shearing stress, (v_{avg}), in the columns of concrete frames is as follows:

$$v_{avg} = \left(\frac{n_c}{N_c - n_f} \right) \left(\frac{V_j}{A_c} \right) \quad (2-13)$$

where:

- A_c = summation of the cross-sectional area of all columns in the story under consideration.
- n_c = total number of columns.
- n_f = total number of frames in the direction of loading.
- V_j = story shear from Equation 2-11.

Equation 2-13 assumes that nearly all of the columns in the frame have similar stiffness. For other configurations of frames, compute the shear stress in the concrete columns from the principles of structural mechanics.

2.4.7.3 Shearing stress in shear walls. The equation for a quick estimate of the average wall shear stress (v_{avg}) is as follows:

$$v_{avg} = \frac{V_j}{A_w} \quad (2-14)$$

where:

- A_w = summation of the horizontal cross-sectional area of all shear walls in the direction of loading. The wall area shall be reduced by the area of any openings. For masonry walls, use the net area. For wood-framed walls, use the length rather than the area.
- V_j = story shear at the level under consideration determined from Equation 2-11.

The allowable stresses for the various types of shear wall building are given in Section 5.1 for concrete shear walls, Section 5.3 for reinforced masonry shear walls, Section 5.4 for unreinforced masonry shear walls and Section 5.6 for wood shear walls.

2.4.7.4 Diagonal bracing. The equation for a quick estimate of the average axial stress in the diagonal bracing (f_{br}) is as follows:

$$f_{br} = \left(\frac{V_j}{sN_{br}} \right) \left(\frac{L_{br}}{A_{br}} \right) \quad (2-15)$$

where:

- A_{br} = the average area of a diagonal brace (in.²).
- L_{br} = average length of the braces (ft).
- N_{br} = number of braces in tension and compression if the braces are designed for compression; if not, use the number of braces in tension, if the braces are not designed for compression.
- s = average span length of braced spans (ft).
- V_j = maximum story shear at each level (kips).

2.4.8 Procedure for evaluating unreinforced masonry bearing wall buildings. Unreinforced masonry bearing wall buildings shall automatically be placed in SPC 1.

2.4.9 Element capacities. Calculate element capacities on the ultimate-strength basis of the 1994 *NEHRP Recommended Provisions*.

When calculating capacities of deteriorated or damaged elements, the evaluator shall make appropriate reductions in the material strength, the section properties and any other aspects of the capacity affected by the deterioration.

2.4.9.1 Wood. The basic document is Chapter 9 of the 1994 *NEHRP Recommended Provisions*, as modified in Section 5.6 of these regulations.

2.4.9.2 Steel. The basic document is Chapter 5 of the 1994 *NEHRP Recommended Provisions*, as modified in Articles 4 and 6 of these regulations.

2.4.9.3 Concrete. The basic document is ACI 318-89. Because this document is on an ultimate-strength basis, the 1994 *NEHRP Recommended Provisions* specifies special load fac-

tors that include the factor of 1.0 for earthquake effects (see Equations 2-1 and 2-2).

2.4.9.4 Masonry. The basic document is Chapter 8 of the 1994 *NEHRP Recommended Provisions*, as modified in Article 5 of these regulations.

2.4.10 Dynamic analysis. Unless otherwise noted, the procedures given in Articles 3 through 10 use the equivalent lateral force procedure. The use of a dynamic analysis procedure is required for the following:

- 1) Buildings 240 feet or more in height;
- 2) Buildings with vertical irregularities caused by significant mass or geometric irregularities;
- 3) Buildings where the distribution of the lateral forces departs from that assumed in the equivalent lateral force procedure; and
- 4) Where required by the evaluation statements in Articles 3 through 10.

Dynamic analysis procedures shall conform to the criteria established in this section. The analysis shall be based on an appropriate ground motion representation as specified in this section and shall be performed using accepted principles of dynamics. Structures that are evaluated in accordance with this section shall comply with all other applicable requirements.

2.4.10.1 Ground motion. The ground motion representation shall be an elastic response spectra developed for mean values for the specific site, in accordance with the procedures in Title 24, Section 1629A.2 of 1995 *California Building Code (CBC)* or equivalent provision in later version of the CBC.

2.4.10.2 Mathematical model. A mathematical model of the physical structure shall represent the spatial distribution of the mass and stiffness of the structure to calculate the significant features of its dynamic response. A three-dimensional model shall be used when the dynamic analysis involves a structure with an irregular plan configuration and rigid or semirigid diaphragms.

2.4.10.3 Analysis procedure.

2.4.10.3.1 Response spectrum analysis. An elastic dynamic analysis of a structure shall use the peak dynamic response of all modes having a significant contribution to total structural response. This requirement may be satisfied by demonstrating that for the modes considered, at least 90% of the participating mass of the structure is included in the calculation of response in each principal horizontal direction. Peak modal responses are calculated using the ordinates of the appropriate response spectrum curve that corresponds to the modal periods. Maximum modal contributions shall be combined in a statistical manner using recognized combination methods to obtain an approximate total structural response.

2.4.10.3.2 Scaling of results. When the base shear for a given direction is less than that required by the equivalent lateral force procedure, the base shear shall be increased to the value prescribed in that procedure. All corresponding response parameters, including deflections, member forces and moments, shall be increased proportionately.

When the base shear for a given direction is greater than that required by the equivalent lateral force procedure, the base shear may be decreased to the value prescribed in that procedure.

All corresponding response parameters, including deflections, member forces, and moments, may be decreased proportionately.

2.4.10.3.3 Post-yield analyses. Post-yield analyses of a simplified model of the building may be made to estimate the nonlinear displacements of the structural system. If the analyses is made with a two-dimensional planar model, the additive torsional displacement shall be established through methods that are equivalent to those used for response spectra analyses.

The displacements or rotations of structural members estimated by the post-yield analysis shall be compared with relevant experimental data to determine the adequacy of the member or system.

2.4.10.4 Torsion. The analysis shall account for torsional effects, including accidental torsional effects, as prescribed in Section 2.4.3.9. Where three-dimensional models are used for analysis, effects of accidental torsion shall be accounted for by appropriate adjustments in the model such as adjustment of mass locations or by equivalent static procedures such as provided in Section 2.4.3.9.

2.4.11 Acceptance criteria. The elements to be analyzed are specified in the procedures given in Articles 3 through 10. The total demand, Q , is calculated by Equation 2-1 or 2-2 as modified below. The capacity, C , is calculated according to the procedures of Section 2.4.9. The basic acceptance criterion is:

$$Q \leq C \quad (2-17)$$

Where elements or portions of a lateral force resisting system are expected to behave in a less ductile manner than the system as a whole, the term Q_E in Equation 2-1 or 2-2 shall be modified or special calculations be made to account for the different failure modes of the various elements. Modification of Q_E , and special calculation procedures and when they shall be used, are described in Articles 3 through 8.

If all significant elements meet the basic acceptance criteria as specified herein, no further analysis is needed.

2.4.12 Assessment of element deficiencies. The result of the checks specified in Articles 3 through 10 will show whether or not the elements meet the requirements of the 1994 *NEHRP Recommended Provisions* as modified herein.

For those elements not meeting the specified acceptance criteria, the relative hazard or seriousness of the deficiencies shall be assessed. Deficiencies shall be ranked according to:

- 1) Degrees of "overstress" (both total and seismic);
- 2) Element importance in the load path; and
- 3) Building, ductile and element stability.

2.5 Final evaluation.

2.5.1 Review the statements and responses. Upon completion of the analysis and field work, the evaluator shall review the evaluation statements and the responses to the statements to ensure that all of the concerns have been addressed.

2.5.2 Assemble and review the results of the procedures. Upon completion of the procedures given in Articles 3 through 10, the evaluator shall assemble and review the results.

2.5.2.1 Q versus C . The criterion $Q \leq C$ is an indication of whether an element meets the requirements of the 1994

NEHRP Recommended Provisions as modified for these regulations. However, because Q involves gravity effects, the ratio of Q to C for an element must be considered in light of the seismic demand versus capacity in order to fully determine the seriousness of the earthquake hazard.

2.5.2.2 D_E/C_E Ratios. The severity of the deficiencies shall be assessed by listing the D_E/C_E ratios in descending order. The element with the largest value is the weakest link in the building. If the element can fail without jeopardizing the building, then the SPC may be based upon the element with the next lower ratio, and so on. Failure of an element will not jeopardize the building provided an alternate load path (neglecting the failed element) exists, and the vertical and lateral stability of the structure, or portions of the structure, is not impaired. The presence of an element with a D_E/C_E greater than one, where failure of that element will jeopardize the stability of the building or element, requires that nonconforming buildings be placed in SPC 1. For conforming buildings, see the appropriate evaluation statement.

2.5.2.3 Qualitative issues. Some of the procedures identify specific deficiencies without any calculation. These deficiencies will automatically place buildings in SPC 1, 3 or 4.

2.5.3 Final evaluation. The final evaluation will place the building in the appropriate the SPC (Table 2.5.3), based on a review of the qualitative and quantitative results of the procedures and the list of deficiencies. In general, an unmitigated “false” answer to an evaluation statement will lower the SPC of the Building. A “false” evaluation statement may be considered mitigated if the building, element or component is justified using the procedure outlined in the evaluation statement, or the effects of the condition are incorporated in the overall evaluation, as described in Section 2.5.2.2.

2.5.3.1 Conforming buildings. Conforming buildings, other than those of welded steel moment frame construction (Building Type 3 and possibly Building Types 4 and 6, if a dual system is present), without any unmitigated “false” evaluation statements shall be placed in SPC 5. Other conforming buildings shall be placed in the lowest SPC directed by the evaluation statements.

2.5.3.2 Nonconforming buildings. An unmitigated “False” answer to any evaluation statement shall result in nonconforming buildings being placed in SPC 1, unless directed otherwise by the procedures for that particular evaluation statement. All other nonconforming buildings shall be placed in SPC 2.

2.6 The final report. The report shall include the following elements:

1. A description of the building, including photographs, and sketches of the lateral-force-resisting system using an OSHPD approved format;
2. The set of statements from the Appendix, with a synopsis of the investigation and supporting calculations that were made;
3. A list of the deficiencies that must be remedied in order to change statement responses from false to true;
4. The SPC for the building, with comments on the relative importance of the deficiencies; and
5. The NPC for the building.

2.7 Alternative analysis. The owner of a building may elect to perform an Alternative Analysis, to evaluate a structure in more detail than that provided by the evaluation procedures specified in these regulations. The methodology of an Alternative Analysis must be approved in advance by OSHPD, and shall meet the following criteria:

TABLE 2.5.3—STRUCTURAL PERFORMANCE CATEGORIES (SPC)

SPC	DESCRIPTION
SPC 1	Buildings posing a significant risk of collapse and a danger to the public. These buildings must be brought up to the SPC 2 level by January 1, 2008, or be removed from acute care service.
SPC 2	Buildings in compliance with the pre-1973 <i>California Building Standards Code</i> or other applicable standards, but not in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act. These buildings do not significantly jeopardize life, but may not be repairable or functional following strong ground motion. These buildings must be brought into compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, its regulations or its retrofit provisions by January 1, 2030, or be removed from acute care service.
SPC 3	Buildings in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, utilizing steel moment-resisting frames in regions of high seismicity as defined in Section 4.2.10 and constructed under a permit issued prior to October 25, 1994. These buildings may experience structural damage which does not significantly jeopardize life, but may not be repairable or functional following strong ground motion. Buildings in this category will have been constructed or reconstructed under a building permit obtained through OSHPD. These buildings may be used to January 1, 2030, and beyond.
SPC 4	Buildings in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, but may experience structural damage which may inhibit ability to provide services to the public following strong ground motion. Buildings in this category will have been constructed or reconstructed under a building permit obtained through OSHPD. These buildings may be used to January 1, 2030, and beyond.
SPC 5	Buildings in compliance with the structural provisions of the Alquist Hospital Facilities Seismic Safety Act, and reasonably capable of providing services to the public following strong ground motion. Buildings in this category will have been constructed or reconstructed under a building permit obtained through OSHPD. These buildings may be used without restriction to January 1, 2030, and beyond.

1. Data collection on the structure and site conditions shall be performed in accordance with the appropriate Sections of Article 2 of these regulations. Depending upon the type of analysis to be performed, additional data regarding the as built condition and material properties may be required;
2. The Alternative Analysis shall be based on a site specific ground motion as specified in Section 3413A.1.2 of the 2007 *California Building Code* (CBC);
3. The analysis of the structure shall determine the distribution of strength and deformation demands produced by the design ground shaking and other seismic hazards. The analysis shall address seismic demands and capacities to resist these demands for all elements in the structure that either:
 - Are essential to the lateral stability of the structure (primary elements); or
 - Are essential to the vertical load-carrying integrity of the building.
4. The analysis procedure may consist of a linear or nonlinear analysis. The analytical methods and acceptance criteria shall conform to Section 3403A.2.3.4 of the 2007 CBC and nonlinear time history analysis procedure shall be reviewed and approved, in advance, by OSHPD.

ARTICLE 3 PROCEDURES FOR BUILDING SYSTEMS

3.0 Introduction. This article sets forth general requirements that apply to all buildings: load path, redundancy, configuration, adjacent buildings and the condition of the materials.

3.1 Load path. The structure contains a complete load path for seismic force effects from any horizontal direction that serves to transfer the inertial forces from the mass to the foundation.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The load path is the most essential requirement for a building. There must be a lateral-force-resisting system that forms a load path between the foundation and all diaphragm levels and that ties all of the portions of the building together. The load path must be complete and sufficiently strong.

3.2 Redundancy. The structure will remain laterally stable after the failure of any single element.

Check whether stability of the structure depends on a single element. If the failure of a single element (member or connection) will result in loss of lateral stability, the element shall be checked for adequacy using an amplification factor of $C_d/2$, but not less than 1.5. P -delta effects shall be included in this check.

3.3 Configuration. Vertical irregularities are defined in terms of discontinuities of strength, stiffness, geometry and mass.

Horizontal irregularities involve the horizontal distribution of lateral forces to the resisting frames or shear walls. Irregularities in the shape of the diaphragm itself (i.e., diaphragms that are L-shaped or have notches) are covered in Article 7.

3.3.1 Weak story. Visual observation or a Quick Check indicates that there are no significant strength discontinuities in any

of the vertical elements in the lateral-force-resisting system; the story strength at any story is not less than 80 percent of the strength of the story above.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check story strengths individually. Where a weak story exists, the resisting elements shall be checked; include P -delta effects and inelastic demand. To compensate for the concentration of inelastic action where the story strength of the weak story is less than 65 percent of the story above, amplify the design forces in the weak story by the factor $C_d/2$, but not less than 1.5. Conforming buildings which fail this check shall be placed in SPC 4.

3.3.2 Soft story. Visual observation or a Quick Check indicates that there are no significant stiffness discontinuities in any of the vertical elements in the lateral-force-resisting system; the lateral stiffness of a story is not less than 70 percent of that in the story above or less than 80 percent of the average stiffness of the three stories above.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the stiffness of certain portions of the building. Where a soft story condition is indicated, the stiffness of the building shall be calculated story by story, in order to determine whether a story falls within the definition of a soft story. Where a soft story exists, the resisting elements shall be checked; include P -delta effects. For buildings more than 65 feet or five stories tall, a dynamic analysis shall be performed to compute the distribution of seismic forces.

3.3.3 Geometry. There are no significant geometrical irregularities; there are no setbacks (i.e., no changes in horizontal dimension of the lateral-force-resisting system of more than 30 percent in a story relative to the adjacent stories).

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. Where geometric irregularities exist, a dynamic analysis shall be performed to compute the vertical distribution of seismic forces.

3.3.4 Mass. There are no significant mass irregularities; there is no change of effective mass of more than 50 percent from one story to the next, excluding light roofs.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the distribution of mass in the building. The effective mass is the real mass consisting of the dead weight of the floor plus the actual weights of partitions and equipment. Where mass irregularities exist, a dynamic analysis shall be performed to compute the vertical distribution of seismic forces.

3.3.5 Vertical discontinuities. All shear walls, infilled walls and frames are continuous to the foundation.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are

necessary. The primary deficiency is in the strength of the columns that support the wall or frame. The secondary deficiency is in the strength of the connecting strut or diaphragm. Conforming buildings which fail these checks shall be placed in SPC 4.

Procedure for columns: Check the columns that support the upper vertical lateral load-resisting element for their capacity to support the gravity loads plus the overturning forces. The overturning forces shall be based on the design forces amplified by the factor $C_d/2$, but not less than 1.5, or on the capacity of the vertical lateral load-resisting element to resist lateral force if this is greater. The column check shall include P -delta effects.

Procedure for strut or diaphragm: Check the strut or diaphragm for its ability to transfer the load from the discontinuous element to the lower resisting element.

3.3.6 Torsion. The lateral-force-resisting elements form a well-balanced system that is not subject to significant torsion. Significant torsion will be taken as any condition where the distance between the story center of rigidity and the story center of mass is greater than 20 percent of the width of the structure in either major plan dimension.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. One deficiency is in the layout and the strengths and stiffness of the walls and frames of the lateral-force-resisting system. Another deficiency is in the strength of columns that are not part of the lateral-force-resisting system but are forced to undergo displacements due to the rotation of the diaphragm. Verify the adequacy of the system by analyzing the torsional response using procedures that are appropriate for the relative rigidities of the diaphragms and the vertical resisting elements. Calculate the maximum story drift (the average building drift plus the additional displacement due to torsion). Verify that all vertical load-carrying elements can maintain their load-carrying ability under the expected drifts. When checking columns, include P -delta effects and consider inelastic demand. Conforming buildings which fail this check shall be placed in SPC 4.

3.4 Adjacent buildings. There is no immediately adjacent structure that is less than half as tall or has floors/levels that do not match those of the building being evaluated. A neighboring structure is considered to be “immediately adjacent” if it is within 2 inches times the number of stories away from the building being evaluated.

The deficiency is the distance between the buildings. Report the condition as a hazard. Where both buildings are designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated. Other conforming buildings which fail these checks shall be placed in SPC 4.

3.5 Deflection incompatibility. Column and beam assemblies that are not part of the lateral-force-resisting system (i.e., gravity load-resisting frames) are capable of accommodating imposed building drifts, including amplified drift caused by diaphragm deflections, without loss of vertical load-carrying capacity.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the ductility of the vertical load-carrying system. Calculate the expected drifts using the procedures in Section 2.4.4. Use net section properties for all reinforced concrete elements in the lateral-force-resisting system. Include the lateral displacements due to diaphragm deflections, using the diaphragm loading computed in Section 2.4.6. Evaluate the capacity of the nonlateral-force-resisting columns and beam assemblies to undergo the combined drift, considering moment-axial force interaction and column shear.

3.6 Short “captive” columns. There are no columns with height-to-depth ratios less than 75 percent of the nominal height-to-depth ratios of the typical columns at that level.

The deficiency is in the tendency of short captive columns to attract high shear forces because of their high stiffness relative to adjacent elements. Calculate the story drift, and determine the shear demand (V_e) in the short column caused by the drift ($V_e = 2M/L$). The ratio of V_e/V_n shall be less than one, where V_n is the column nominal shear capacity computed in accordance with ACI criteria. Conforming buildings which fail these checks shall be placed in SPC 4.

3.7 Evaluation of materials and conditions.

3.7.1 Deterioration of wood. None of the wood members shows signs of decay, shrinkage, splitting, fire damage or sagging, and none of the metal accessories is deteriorated, broken or loose.

The deficiency is in the capacity of the deteriorated elements. Determine the cause and extent of damage. Identify the lateral-force-resisting system and determine the consequences of the damage to the system. The system shall be judged adequate if it can perform with the damaged elements. Check the structural systems with appropriate reductions in member properties.

3.7.2 Overdriven nails. There is no evidence of overdriven nails in the shear walls or diaphragms.

The deficiency is in the capacity of the fasteners. Check the wall demand and capacity, using reduced strength due to overdriven fasteners.

3.7.3 Deterioration of steel. There is no significant visible rusting, corrosion or other deterioration in any of the steel elements in the vertical- or lateral-force-resisting systems.

The deficiency is the reduction in cross-section of the elements. Check the structural systems with appropriate reductions in member properties. See Article 4 for inspection requirements for welded steel moment-resisting frame structures.

3.7.4 Deterioration of concrete. There is no visible deterioration of concrete or reinforcing steel in any of the frame elements.

The deficiency is the reduction in member properties. Check the structural systems with appropriate reductions in member capacities.

3.7.5 Post-tensioning anchors. There is no evidence of corrosion or spalling in the vicinity of post-tensioning or end fittings. Coil anchors have not been used.

The deficiency is the reduced area of the prestress strands and, with coil anchors, the ability of the anchorage to maintain its grip under cyclic loading. Inspect a sample of the concrete in the area of the anchorage to determine its condition. Determine the cause and extent of the deterioration. Consider the effects of anchorage failure on the vertical and lateral load-carrying capacity of the structure.

3.7.6 Concrete wall cracks. All diagonal cracks in the wall elements are 1.0 mm or less in width, are in isolated locations and do not form an X pattern.

The deficiency is the reduced capacity of the wall. Determine the cause and extent of the cracking. Check the structural systems with reduced wall capacity.

3.7.7 Cracks in boundary columns. There are no diagonal cracks wider than 1.0 mm in concrete columns that encase the masonry infills.

The deficiency is the reduced capacity of the wall. Evaluate the wall with limited capacity assigned to the deteriorated elements. Determine the cause and extent of the damage.

3.7.8 Precast concrete walls. There is no significant visible deterioration of concrete or reinforcing steel or evidence of distress, especially at the connections.

The deficiency is in the strength of the connections. Determine the cause and extent of distress and check the structural systems with appropriate reductions in capacity.

3.7.9 Masonry joints. The mortar cannot be easily scraped away from the joints by hand with a metal tool, and there are no significant areas of eroded mortar.

The deficiency is in the strength of the wall. Check the adequacy of the walls with the strength determined by tests. This evaluation statement also applies to masonry veneers present on the exterior or interior walls of the building.

3.7.10 Masonry units. There is no visible deterioration of large areas of masonry units.

The deficiency is in the strength of the units. Determine the cause and extent of deterioration and use reduced capacity in determining the adequacy of the units.

3.7.11 Cracks in infill walls. There are no diagonal cracks in the infilled walls that extend throughout a panel or are greater than 1.0 mm wide.

The deficiency is the reduced capacity of the wall. Determine the cause and extent of the cracking. If appropriate, check the structural systems with reduced wall capacity.

ARTICLE 4 PROCEDURES FOR MOMENT-RESISTING SYSTEMS

4.0 Introduction. Moment frames develop their resistance to lateral forces through the flexural strength and continuity of beam and column elements. Moment frames may be classified as special, intermediate and ordinary frames.

For evaluations using these regulations, it is not necessary to determine the type of frame in the building. The issues are addressed by appropriate acceptance criteria in the specified

procedures. For determination of element capacities, see Article 2, Section 2.4.9.

4.1 Frames with infill walls.

4.1.1 Interfering walls. All infill walls placed in moment frames are isolated from structural elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is an inappropriate connection of the wall to the frame. Evaluate the relative strength and stiffness of the walls and frames, considering the nature and size of the joint or connection between the wall and the frame. If the strength of the walls is not commensurate with the stiffness, the building should be treated as Type 7 or Type 10 (Article 2, Section 2.2.3 “Common Building Types”), a frame with infill walls. If the infill walls do not extend the full story height and are not properly isolated from the frame columns, evaluate the column shear demand and capacity, based on a column height equal to the clear distance from the top of the wall to the bottom of the slab or beam above, amplifying the design forces in the short column by $C_d/2$, but not less than 1.5. The shear demand need not exceed the shear capacity corresponding to flexural capacity of the column, based on a column height equal to the clear distance from the top of the wall to the bottom of the slab or beam above.

4.2 Steel moment frames. Welded steel moment frames may be subject to detailed frame joint evaluation requirements, as outlined in this section. The purpose of this joint evaluation is to determine if the building has experienced joint damage in strong ground shaking.

4.2.0.1 Preliminary screening. All welded steel moment frame structures shall undergo a detailed frame joint evaluation if the building is located at a site that has experienced the following:

1. An earthquake of magnitude greater than or equal to 6.5 that produced ground motion in excess of 0.20 g; or
2. An earthquake that generated ground motion in excess of 0.30 g.

The ground motion estimates shall be based on actual instrumental recordings in the vicinity of the building. When such ground motion records are not available, ground motion estimates may be based on empirical or analytical techniques. All ground motion estimates shall reflect the site-specific soil conditions.

4.2.0.2 Additional indicators. A detailed frame joint evaluation of the building shall be performed if any of the following apply:

1. Significant structural damage is observed in one or more welded steel moment frame structures located within 1 km of the building on sites with similar, or more firm, soil properties;
2. An earthquake having a magnitude of 6.5 or greater, where the structure is located within 5 km of the trace of a surface rupture or within the vertical projection of the rupture area when no surface rupture has occurred;
3. Significant architectural or structural damage has been observed in the building following an earthquake; or

4. Entry to the building has been limited by the building official because of earthquake damage, regardless of the type or nature of the damage.

4.2.0.3 Connection inspections. Detailed frame joint evaluations shall be performed in accordance with the procedures in the *Interim Guidelines: Evaluation, Repair, Modification and Design of Welded Steel Moment Frame Structures*, FEMA 267, August 1995.

4.2.1 Drift check. The building satisfies the Quick Check of the frame drift.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check drift using the procedures in Section 2.4.7.1 against the prescribed limit. If the drift exceeds the limiting drift at any story level, the structure shall be evaluated with full-frame analysis using the anticipated distribution of lateral forces to the moment-resisting frames and including P -delta effects. Check the other statements using the demand from this analysis.

4.2.2 Compact members. All moment-frame elements meet the compact section requirements of the basic AISC documents.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the member capacities. Check member capacities, using member demands obtained from a frame analysis. Calculate member capacities using appropriate criteria for noncompact sections. Check the member capacities using appropriate R values (e.g., noncompact members require use of the R value for ordinary frames).

4.2.3 Beam penetrations. All openings in frame-beam webs have a depth less than one-fourth of the beam depth and are located in the center half of the beams.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the shear capacity of the beam. Check that the shear capacity of the beam is sufficient to develop the flexural plastic hinge. If the shear capacity is insufficient to develop the flexural capacity of the member, use the R value for ordinary frames.

4.2.4 Moment connections. All beam-column connections in the lateral-force-resisting moment frame have full-penetration flange welds and a bolted or welded web connection.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the connection. Check the connection on the basis of its strength. Check the member capacities using appropriate R values. Connections that do not develop the flexural capacity of the member require use of the R value for ordinary frames.

4.2.5 Column splices. All column splice details of the moment-resisting frames include connection of both flanges and the web.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the bolts or welds in the connec-

tion. Check the adequacy of the splice connection for all gravity and seismic loads. Amplify the seismic load for partial-penetration welded splices by the factor $C_d/2$.

4.2.6 Joint webs. All web thicknesses within joints of moment-resisting frames meet AISC criteria for web shear.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the web. Calculate the joint shear capacity using formulas given in the AISC provisions and compare it to the demand from an equivalent lateral force analysis or the average column shear, V_c , calculated for the Quick Check for drift.

4.2.7 Girder flange continuity plates. There are girder flange continuity plates at joints.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the joint. Check joints without such plates using AISC provisions, using the R value for ordinary frames.

4.2.8 Strong column/weak beam. At least one half of the joints in each story are strong column/weak beam (33 percent on every line of moment frame). Roof joints need not be considered.

The deficiency is excessive ductility demand and displacement in a single story. Compare beam and column moment capacities, including the effect of axial force. The evaluator may consider this condition mitigated if the joints in the building meet the provisions of Section 2710(g)5 of the 1992 edition of Part 2, Title 24. Conforming buildings which do not meet those provisions shall be placed in SPC 4.

4.2.9 Out-of-plane bracing. Beam-column joints are braced out-of-plane.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the stability of the beam-column joint. Verify the joint bracing by visual observation.

4.2.10 Pre-Northridge earthquake welded moment frame joints. Welded steel moment frame beam-column joints are designed and constructed in accordance with recommendations in FEMA 267, *Interim Guidelines: Evaluation, Repair, Modification and Design of Welded Steel Moment Frame Structures*, August 1995.

For buildings constructed under permit issued after October 25, 1994, the evaluator may consider this condition as mitigated. The deficiency is in the ductility of the beam-column joint. The following procedures shall be used for categorizing buildings with welded steel moment frame joints:

Procedure for conforming buildings: Conforming buildings located in Seismic Zone 4 of 1995 *California Building Code* (CBC) or later version of the CBC, within a zone designated as being potentially subject to near field effects in strong ground shaking, shall be placed in SPC 3.

All other conforming buildings shall be placed in SPC 4.

Procedure for nonconforming buildings: Nonconforming buildings shall be placed in SPC 2.

One-story building $h_w/t < 14$

Multistory building

Top story $h_w/t < 9$

Other stories $h_w/t < 20$

The deficiency is in the out-of-plane strength of the wall. Check the out-of-plane demand using the procedure for parts and portions of a building given in Section 2.4.6.

5.5.2 Solid walls. The infill walls are not of cavity construction.

The deficiency is in the out-of-plane strength of the wall. If infill walls are of cavity construction, report this as a deficiency.

5.5.3 Infill walls. The infill walls are continuous to the soffits of the frame beams.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the columns. Check the shear capacity of the columns to develop opposing yield moments at top and bottom of the short free height or to resist required force amplified by the factor $C_d/2$, but not less than 1.5.

5.5.4 Wall connections. All infill panels are constructed to encompass the frames around their entire perimeter.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the connection of the infill panel to the frame. Determine the panel edge condition from available drawings or from field investigation. If the panels are not properly connected to the frame, report this condition as a deficiency.

5.6 Walls in wood frame buildings.

5.6.1 Shearing stress check. The building satisfies the Quick Check of the shearing stress in wood shear walls.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Generate the lateral loads using the Quick Check procedure of Section 2.4.7.3 and compare to 400 pounds per foot of plywood wall or 50 pounds per foot of walls composed of gypsum board or other materials. If v_{avg} is greater than these values, a more detailed evaluation of the structure shall be performed. This evaluation shall employ a more accurate estimation of the level and distribution of the lateral loads using the analysis procedures in Article 2.

5.6.2 Openings. Walls with garage doors or other large openings are braced with plywood shear walls or are supported by adjacent construction through substantial positive ties.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the lateral-force-resisting system. Check the ability of the walls and diaphragms to control, through torsional capacity, displacements at walls with large openings. Check that the diaphragm is a complete system with chords and collectors provided to deliver the lateral loads as required.

5.6.3 Wall requirements. All walls supporting tributary area of 24 to 100 square feet per foot of wall are plywood sheathed

with proper nailing or rod braced and have a height-to-depth (H/D) ratio of 1 to 1 or less or have properly detailed and constructed hold-downs.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the wall and/or in hold-downs to resist overturning forces. Check the walls using floor areas tributary to the walls. Check all portions of the load path to ensure proper force transfer.

5.6.4 Cripple walls. All exterior cripple walls below the first floor level are braced to the foundation with shear elements.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the shear strength of the cripple walls. Check all exterior cripple walls below the first floor level to ensure that they are braced to the foundation with shear elements.

5.6.5 Narrow shear walls. Narrow wood shear walls with an aspect ratio greater than 2 to 1 do not resist forces developed in the building.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the narrow walls. Determine the shear capacity of the wall and related overturning demand. This shear capacity and related overturning must be transferred to the foundation within allowable stresses.

5.6.6 Stucco (exterior plaster) shear walls. Multistory buildings do not rely on exterior stucco walls as the primary lateral-force-resisting system.

The deficiency is in the strength of the stucco walls. Inspect stucco-clad buildings to determine if there is a lateral system such as plywood or diagonal sheathing at all but the top floor. Where exterior plaster is present, verify that the wire reinforcing is attached directly to the wall framing and the wire is completely embedded into the plaster material. Conforming buildings which fail this check shall be placed into SPC 4.

5.6.7 Plaster or gypsum wallboard shear walls. Interior plaster or gypsum wallboard is not being used for shear walls in buildings over one story in height.

The deficiency is in the strength of the walls. Determine if there is a lateral system such as plywood or diagonal sheathing at all but the top floor. Multistory buildings shall not rely on interior plaster or gypsum wallboard walls as the primary lateral-force-resisting system. Conforming buildings which fail this check shall be placed into SPC 4.

ARTICLE 6 PROCEDURES FOR BRACED FRAMES

6.0 Introduction. Braced frames develop their resistance to lateral forces by the bracing action of diagonal members. The braces induce forces in the associated beams and columns so that all work together like a truss with all members subjected to stresses that are primarily axial.

A **Concentrically braced frame** has minor eccentricities in the joints of the frame that are accounted for in the design.

An **Eccentrically braced frame** has elements that are strictly controlled to combine a stiffening effect due to the diagonal braces with yielding in the link beams. Eccentrically braced frames are present only in conforming buildings.

6.1 Concentrically braced frames.

6.1.1 Stress check. The building satisfies the Quick Check of the stress in the diagonals.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Calculate the average axial stress in the diagonals using the procedures of Section 2.4.7.4. Increase the calculated stress to account for torsion, based on the amount of torsion (Section 3.3.6) present and the distance between braced frames. If the average stress exceeds 30 ksi, an accurate analysis of the stresses on the bracing elements shall be performed.

6.1.2 Stiffness of diagonals. All diagonal elements required to carry compression have Kl/r ratios less than 120.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the stiffness of the diagonals. Check the bracing elements, amplifying the seismic force by the factor 1.25.

6.1.3 Tension-only braces. Tension-only braces are not used as the primary diagonal bracing elements in structures over two stories in height.

The deficiency is in the strength of the braces. Check the braces. If they are tension-only, and the building is over two stories in height, place the building in SPC 1. Tension-only bracing of small penthouse structures may be reviewed using the procedures in Section 2.4.6. Conforming buildings which fail this check shall be placed in SPC 4.

6.1.4 Chevron bracing. The bracing system does not include chevron-, V-, or K-braced bays.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check all elements in the braced frames. For chevron- and V-braced frames, the beam shall be a single element that can carry the gravity loads without the intermediate support of the braces. Check the adequacy of the beam for the seismic forces amplified by $C_d/2$, but not less than 1.5. Consider the effect of buckling of a leg of chevron-bracing or V-bracing, including the continuity, strength, and bracing of the beams and the ability of the connection to permit buckling of the brace while not destroying the capacity for repeated cycles of loading. If K-bracing is used in buildings over two stories, amplify the seismic forces in the bracing and columns by the factor $C_d/2$, but not less than 1.5.

6.1.5 Concentric joints. All the diagonal braces frame into the beam-column joints concentrically.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the joints. Evaluate the consequence of the eccentricity on the member required to resist it. Evaluate the shear, bending and axial force requirements at the locations of eccentricities.

6.1.6 Connection strength. All the brace connections are able to develop the yield capacity of the diagonals.

The deficiency is in the strength of the connections. Check the connection strength. Use a demand value that develops the tensile capacity of the brace or is 1.25 times the required seismic force. If connections in a conforming building cannot develop the yield capacity of the brace and do not meet the requirements of Part 2, Title 24, Section 2211A.9.3 of 1995 *California Building Code* (CBC) or equivalent provision in later version of the CBC, the building shall be placed in SPC 4.

6.1.7 Column splices. All column splice details of the braced frames can develop the column yield capacity.

The deficiency is in the strength of the splice. Calculate the adequacy of the splice connection for all expected forces including gravity loads. Amplify the seismic load for partial penetration welded splices by the factor $C_d/2$ when the seismic load produces tension at the splice. If the column splice details in a conforming building cannot develop the yield capacity of the column and do not meet the requirements of Part 2, Title 24, Section 2211A.9.5 of 1995 *California Building Code* (CBC) or equivalent provision in later version of the CBC, the building shall be placed in SPC 4.

6.1.8 Concrete braced frames. None of the braces in the framing system are of reinforced concrete construction.

The deficiency is in the ductility of the braced frame. Report this condition as a deficiency, and place nonconforming buildings in SPC 1. Place conforming buildings in SPC 4.

6.2 Eccentrically braced frames.

6.2.1 Link beam location. The link beams are not connected to the columns.

The deficiency is in the ductility of the link beam-column connection. Report this condition and place the building in SPC 4.

ARTICLE 7 PROCEDURES FOR DIAPHRAGMS

7.0 Introduction. The diaphragm is the horizontal subsystem that distributes lateral load to the vertical subsystems (walls and frames) and that provides lateral support for walls and parapets.

7.1 Diaphragms. Diaphragms are treated as horizontal beams. The floor (or roof), which is analogous to the web of a wide-flange beam, is assumed to carry the shear; the edge of the floor (or roof) or a spandrel, which is analogous to the flange, is assumed to carry the flexural stress.

7.1.1 Plan irregularities. There is significant tensile capacity at reentrant corners or other locations of plan irregularities.

For buildings designed and constructed in accordance with the 1989 or later editions of Part 2, Title 24, the evaluator may consider this condition as mitigated, and no calculations are necessary. The deficiency is in the strength of the diaphragm in the vicinity of corners. Evaluate the chord/collector requirements at the reentrant corners and other locations of plan irregularities by applying the maximum of the diaphragm force and the calculated story force to a model of the isolated diaphragm. All elements that can contribute to the tensile capacity at the reentrant corner may be included with appropriate consideration given to gravity load stresses. Conforming buildings which fail this check shall be placed in SPC 4.

The deficiency is in the strength of the connections. Determine the cause and extent of distress and check the attachment of the panels with appropriate reductions in capacity. Conforming buildings that fail this check shall be placed in SPC 4.

10.1.6 Parapets, cornices, ornamentation and appendages.

There are no laterally unsupported unreinforced masonry parapets or cornices above the highest anchorage level with height/thickness ratios greater than 1.5. Concrete parapets with height/thickness ratios greater than 1.5 have vertical reinforcement. Cornices, parapets, signs and other appendages that extend above the highest anchorage level or cantilever from exterior wall faces and other exterior wall ornamentation are reinforced and well anchored to the structural system.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. If any of these items are of insufficient strength and/or are not securely attached to the structural elements, they may break off and fall, becoming significant life-safety hazards. Check the adequacy of these items using the forces specified in Section 2.4.6.

10.1.7 Means of egress. Canopies are anchored and braced to prevent collapse and blockage of building exits.

For conforming buildings, the evaluator may consider this condition as mitigated, and no calculations are necessary. Check canopies for the forces specified in Section 2.4.6.

ARTICLE 11 EVALUATION OF CRITICAL NONSTRUCTURAL COMPONENTS AND SYSTEMS

11.0 Introduction. This article covers nonstructural components and systems critical to patient care.

11.01 Nonstructural evaluation procedure.

1. The nonstructural performance evaluation shall examine the respective critical nonstructural systems and elements for the planned NPC as specified in Table 11.1, "Nonstructural Performance Categories." The nonstructural evaluation process shall include the following steps:
 1. Site visit and data collection;
 2. Identification of building SPC;
 3. Identification of critical nonstructural systems for the planned NPC;
 4. Identification of critical care services housed in the building;
 5. Final evaluation for the critical nonstructural elements and systems for the planned NPC;
 6. Preparation of evaluation report; and
 7. Submittal of evaluation report to OSHPD.
2. A general acute care hospital facility may be exempted from a nonstructural evaluation upon submittal of a written statement by the hospital owner to OSHPD certifying the following conditions:

1. The building is designated "NPC 1" in conformance with Table 11.1 "Nonstructural Performance Categories," or
2. The building is designated "NPC 4" in conformance with Table 11.1 "Nonstructural Performance Categories" and provided:
 - a) The building was designed and constructed under a building permit issued by OSHPD;
 - b) All subsequent repairs, remodels, additions and alterations were performed under a permit issued by OSHPD, and
 - c) Fire sprinkler systems have been retrofitted in conformance with Table 11.1, "Nonstructural Performance Categories."
3. If a hospital owner elects to obtain a higher NPC at a future date, additional nonstructural evaluations as specified in Section 11.01.1 will be required.
4. If a hospital owner sells or leases the hospital to another party, a complete nonstructural evaluation and list of all nonstructural deficiencies to achieve NPC 5 shall be submitted to the Office prior to the completion of the sale or lease.

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.

11.1.1 Site visit and evaluation. The evaluator shall:

1. Visit the building to observe and record the type, nature and physical condition of the nonstructural elements and systems for the planned NPC;
2. Note the SPC of the buildings based on procedures followed in Article 2;
3. Assemble building design data including:
 - a. Construction drawings, specifications and calculations, and
 - b. All drawings, specifications and calculations for remodeling work.
4. During the visit, the evaluator shall:
 - a. Verify existing data;
 - b. Develop other needed data (e.g., measure and sketch building if necessary);
 - c. Verify the critical nonstructural systems of the planned NPC;
 - d. Verify the critical care areas/services; and
 - e. Identify special conditions which may impact the nonstructural systems or endanger the function of the critical care areas/services.

If drawings are not available, the site visit and evaluation shall be performed as described in this section.

5. Review other data available such as assessments of building performance and function following past earthquakes;
6. Prepare a summary of data using an OSHPD approved format;
7. Perform the evaluation using the procedures in Section 11.2; and
8. Prepare a report of the findings of the evaluation using an OSHPD approved format.

11.2 Evaluation of buildings. Conforming and non-conforming buildings shall be placed in an NPC based upon the degree of anchorage and bracing for those systems and equipment specified in Table 11.1. The scope of the nonstructural evaluation may be limited to the nonstructural systems and elements specified in Table 11.1 for the planned NPC. Buildings which do not meet the requirements for NPC 2 as defined in Table 11.1 shall be placed in NPC 1.

TABLE 11.1—NONSTRUCTURAL PERFORMANCE CATEGORIES

TIMEFRAMES	NONSTRUCTURAL PERFORMANCE CATEGORY ¹	DESCRIPTION
	NPC 1	Buildings with equipment and systems not meeting the bracing and anchorage requirements of any other NPC.
January 1, 2002	NPC 2	The following systems 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.
January 1, 2008	NPC 3/NPC 3R	The building meets the criteria for NPC “2” and in critical care areas, clinical laboratory service spaces, pharmaceutical service spaces, radiological service spaces, and central and sterile supply areas, the following components meet the bracing and anchorage requirements of Part 2, Title 24 ² : <ul style="list-style-type: none"> • Nonstructural components, listed in the 1995 CBC, Part 2, Title 24, Table 16A-0. <p>Exception: For NPC 3R, lateral bracing of suspended ceiling systems may be omitted in rooms with a floor area less than 300 square feet, provided the room is not an intensive care or coronary care unit patient room, angiography laboratory, cardiac catheterization laboratory, delivery room, operating room or post-operative recovery room.</p> • “Equipment,” as listed in the 1995 CBC, Part 2, Title 24, Table 16A-0, “Equipment,” including equipment in the physical plant that service these areas. <p>Exceptions: 1. Seismic restraints need not be provided for cable trays, conduit and HVAC ducting. Seismic restraints may be omitted from piping systems, provided that an approved method of preventing release of the contents of the piping system in the event of a break is provided.</p> <p>2. Only elevator(s) selected to provide service to patient, surgical, obstetrical and ground floors during interruption of normal power need to meet the structural requirements of Part 2, Title 24.</p> • Fire sprinkler systems comply with the bracing and anchorage requirements of NFPA 13, 1994 edition, or subsequent applicable standards. <p>Exception: Acute care hospital facilities in both a rural area as defined by Section 70059.1, Division 5 of Title 22 and Seismic Zone 3 shall comply with the bracing and anchorage requirements of NFPA 13, 1994 edition, or subsequent applicable standards by January 1, 2013.</p>
	NPC 4	The building meets the criteria for NPC “3” and all architectural, mechanical, electrical systems, components and equipment, and hospital equipment meet the bracing and anchorage requirements of Part 2, Title 24 ² . This category is for classification purposes of the Office of Emergency Services.
January 1, 2030	NPC 5	The building meets the criteria for NPC “4” and onsite supplies of water and holding tanks for wastewater, sufficient for 72 hours emergency operations, are integrated into the building plumbing systems. As an alternative, hook-ups to allow for the use of transportable sources of water and sanitary waste water disposal have been provided. An onsite emergency system as defined within Part 3, Title 24 is incorporated into the building electrical system for critical care areas. Additionally, the system shall provide for radiological service and an onsite fuel supply for 72 hours of acute care operation.

¹For the purpose of NPC 2 and NPC 5, all enumerated items within Table 11.1 shall meet the requirements of Section 1632A of 2001 *California Building Code* (CBC) or equivalent provision in later version of the CBC by the specified timeframe as indicated by their respective NPC.

²For the purposes of NPC 3 and NPC 4, all enumerated items within Table 11.1 shall meet the requirements of the 1998 CBC, Section 1630B, by the specified timeframe. For the purposes of NPC 3R, all enumerated items within Table 11.1 shall meet the requirements of the 1995 CBC, Section 1630A, using $l_p = 1.0$, by the specified timeframe.

11.2.1 Evaluation procedures for NPC 2. The following steps shall determine if the building meets the criteria for NPC 2:

- a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 as specified in Table 11.1;
- b) Conduct an inventory of components and equipment, noting whether the items are anchored or braced;
- c) Determine if the anchorage or bracing of the identified components and equipment complies with the following conditions:
 1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24; or
 2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing:
 - a) the installation; b) bear an Office of Architecture and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval that begins with the “H” prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demonstrated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.1(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 2.

Installation is defined as that which shows the size and type of material for all components of the system, including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

- d) If the components and equipment inventoried in 11.2.1(b) is anchored or braced, but does not meet the requirements of Section 11.2.1(c), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1. The bracing capacity shall be determined by calculations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete or wood determined by approved tests; and
- e) If any of the items inventoried in 11.2.1(b) are unanchored or inadequately braced as determined by Section 11.2.1(d), the building shall be placed in NPC 1.

11.2.2 Evaluation procedures for NPC 3 and NPC 3R. The following steps shall determine if the building meets the criteria for NPC 3 or NPC 3R:

- a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 and NPC 3 or NPC 3R;
- b) Conduct an inventory of components and equipment specified in Table 11.1, NPC 3 and NPC 3 R, noting whether the components and equipment are anchored or braced;

Exception: Any general acute care hospital facility located in both a “rural area” as defined in Section 70059.1, Division 5, Title 22 and Seismic Zone 3 pursuant to 1995 *California Building Code (CBC)* or later version of the CBC shall comply with the fire sprinkler system anchorage and bracing requirements of NFPA 13, 1994 edition or subsequent standard by January 1, 2013.

- c) Determine the level of NPC 3 conformance desired.
 1. Buildings classified as SPC 1 or SPC 2 are permitted to meet the NPC 3 performance level, or the NPC 3R performance level. See also Section 11.2.3(c).
 2. Buildings classified as SPC 3 or higher must meet the NPC 3 performance level.
- d) Determine if the anchorage or bracing of the identified components and equipment complies with the following conditions:
 1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24; or
 2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing:
 - a) the installation; b) bear an Office of Architecture and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval stamp that begins with an “H” prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demonstrated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.2(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 2 and NPC 3 or NPC 3R.

Installation is defined as that which shows the size and type of material for all components of the system including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

- e) If the components and equipment inventoried in 11.2.2(b) are anchored or braced, but do not meet the requirements of Section 11.2.2(d), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1 for NPC 3 or NPC 3R. The bracing capacity shall be determined by calcu-

lations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete, or wood determined by approved tests. For NPC 3R, the investigation of the adequacy of anchorage and bracing may be limited to the connection of the component or equipment to the support when the total reaction at the point of support (including the application of F_p) is less than:

1. 250 pounds for components or equipment attached to light frame walls. For the purposes of this requirement, the sum of the absolute value of all reactions due to component loads on a single stud shall not exceed 250 pounds.
2. 1,000 pounds for components or equipment attached to roofs, or walls of reinforced concrete or masonry construction.
3. 2,000 pounds for components or equipment attached to floors or slabs-on-grade.

Exception: If the anchorage or bracing is configured in a manner that results in significant torsion on a supporting structural element, the effects of the nonstructural reaction force on the structural element shall be considered in the anchorage design.

- f) If any of the items inventoried in 11.2.2(b) are inadequately anchored or braced, as determined by Section 11.2.2(d), the building shall be placed in NPC 4.

11.2.3 Evaluation procedures for NPC 4. The following steps shall be followed to determine if the building meets the criteria for NPC 4:

- a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 through NPC 4;
- b) Conduct an inventory of components and equipment specified in Table 11.1, NPC 2 through NPC 4, noting whether the components and equipment are anchored or braced;
- c) Determine if the anchorage or bracing of the identified components and equipment complies with one of the following conditions:
 1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24. Installation or retrofit of components that were designed to meet NPC 3R requirements must be shown to meet the anchorage and bracing requirements of the *California Building Code* for new construction. Components designed to meet NPC 3R requirements that do not meet the anchorage and bracing requirements for new construction shall be retrofitted to meet those requirements; or
 2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing:
 - a) the installation; b) bear an Office of Architecture

and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval stamp that begins with an “H” prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demonstrated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.3(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 4.

Installation is defined as that which shows the size and type of material for all components of the system including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

- d) If the components and equipment inventoried in 11.2.3(b) are anchored or braced, but do not meet the requirements of Section 11.2.3(c), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1. The bracing capacity shall be determined by calculations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete or wood determined by approved tests; and
- e) If any of the items inventoried in 11.2.3(b) is unanchored or inadequately braced as determined by Section 11.2.3(d), the building shall be placed in NPC 3.

11.2.4 Evaluation procedures for NPC 5. The following steps shall determine if the building meets the criteria for NPC 5:

- a) Identify the specific nonstructural components and equipment that are subject to the requirements of NPC 2 through NPC 5;
- b) Conduct an inventory of components and equipment specified in Table 11.1, NPC 2 through NPC 5, noting whether the components and equipment are anchored or braced;
- c) Determine if the anchorage or bracing of the identified components and equipment complies with the following conditions:
 1. Installed under a permit issued by OSHPD. Drawings showing the installation and bearing an OSHPD approval stamp are required to show that the installation conforms to Part 2, Title 24; or
 2. Reviewed and approved by the Department of General Services, Office of Architecture and Construction, Structural Safety Section. Drawings showing:
 - a) the installation; b) bear an Office of Architecture and Construction, Structural Safety Section approval stamp; and c) a five-digit project number on the approval stamp that begins with an “H” prefix, are required to demonstrate that the installation conforms to Part 2, Title 24. It shall also be demon-

strated by a written report submitted by the structural engineer, acceptable to the enforcement agency, that an investigation of the anchorage and bracing of components and equipment identified in Section 11.2.4(a) shows it to be constructed in reasonable conformity with these drawings.

Anchorage and bracing of elements that comply with either of these conditions are considered to meet the requirements of NPC 5.

Installation is defined as that which shows the size and type of material for all components of the system including the anchor or fastener manufacturer (if proprietary), type, total number and embedment if connected to structural concrete, masonry or wood.

- d) If the components and equipment inventoried in 11.2.4(b) are anchored or braced, but do not meet the requirements of Section 11.2.4(c), determine if the bracing and anchorage is sufficient to meet the code requirements specified in Table 11.1. The bracing capacity shall be determined by calculations based upon information shown in the construction documents. If these documents are incomplete or unavailable, the evaluation shall be based on the as-built conditions, with the capacity of fasteners to masonry, concrete or wood determined by approved tests; and
- e) If any of the items inventoried in 11.2.4(b) is inadequately anchored or braced as determined by 11.2.4(d), the building shall be placed in NPC 4.

11.3 Testing requirements for evaluating the performance of existing mechanical fasteners. A testing program shall be instituted to determine the capacity of mechanical fasteners used to anchor nonstructural components including the bracing of pipes, ducts and conduit, and the attachment of equipment and other components listed in the 1995 CBC, Part 2, Title 24, Table 16A-0. Anchors shall be categorized as either seismic bracing of pipes ducts or conduit or equipment and other component anchors.

11.3.1 Anchors used in the seismic bracing of pipes, ducts or conduit. For anchors used in the seismic bracing of pipes, ducts or conduit, the following shall apply:

1. Twenty percent of the anchors (20 minimum) of a given size and type (wedge, shell and sleeve for expansion bolts), at each level of the structure shall be tension tested to three times the maximum calculated design load specified in Section 1630B of 1998 *California Building Code* (CBC) or equivalent provision in later version of the CBC but not less than 500 pounds. A minimum of one anchor in any 4-bolt group shall be tested assuming an equal distribution of the calculated force to the bolt group. One-quarter ($1/4$)-inch diameter anchors need not be tested. Where none of the anchors in the group have calculated tension, testing shall consist of torque testing.

Exception: Internally threaded anchors, such as shell-type anchors, shall be tested to four times the maximum calculated design loads. Attachment hardware shall be shimmed or removed prior to testing so that it does not prevent the possible withdrawal of the anchor.

2. If an anchor fails the tension test, 20 anchors, installed by the same trade, in the immediate vicinity of the failed anchor shall be tested prior to resuming to a 20 percent sampling rate for testing.

11.3.2 Anchors used in the attachment of equipment and other components. For anchors used in the attachment of equipment and other components listed in the 1995 CBC, Part 2, Title 24, Table 16A-0, the following shall apply:

1. A minimum of one anchor of a given size shall be tension tested for each piece of equipment or other component under consideration. Where the number of anchors for the piece of equipment or component exceeds four, a minimum of 20 percent of the anchors shall be tension tested. Where none of the anchors in the group have calculated tension, testing shall consist of torque testing.
2. The tension test load shall be three times the maximum tension force calculated for an anchor in the attachment group using the design loads specified in Section 1630B of 1998 *California Building Code* (CBC) or equivalent provision in later version of the CBC or 500 pounds minimum. One-quarter ($1/4$)-inch diameter anchors need not be tested.

Exception: Internally threaded anchors, such as shell type anchors, shall be tested to four times the maximum calculated design loads. Attachment hardware shall be shimmed or removed prior to testing so that it does not prevent the possible withdrawal of the anchor.

3. If a single anchor fails, all anchors in the attachment group shall be tested. If two or more anchors fail, the component shall be retrofitted for the forces as for new construction.

11.3.3 Tension testing procedure.

1. Testing of anchors shall be accomplished by the application of externally applied direct tension force to the anchor. The testing apparatus shall not restrict the probable shear cone failure surface of the concrete or masonry.
2. Torque testing is not permitted in lieu of tension testing unless specifically allowed in these provisions.
3. A failure is defined when the tension load on the anchor produces a slip of $1/8$ inch, a shear cone failure in the concrete or masonry, concrete splitting, or fracture of the steel anchor itself prior to attaining the test load value.

Exception: For internally threaded anchors, the allowable slip shall not exceed $1/16$ inch.

11.3.4 Alternate test criteria. In lieu of testing in accordance with Section 11.3.1 or 11.3.2, a test load may be established by the evaluating engineer. The allowable load that the anchor can resist shall be determined by dividing the test load by the appropriate factors noted in Section 11.3.1 or 11.3.2. No one-third increase is permitted for seismic or wind loads.

11.3.5 Allowable shear loads. Allowable shear loads on anchors shall be determined by either of the following:

1. Shear values listed in Table 19B-E of 1998 *California Building Code* (CBC) or equivalent provision in later version of the CBC, or

2. Shear values shall be obtained by analysis using Strength Design of Anchorage to Concrete, Section A.6, published by the Portland Cement Association, 1999, with the specified reduction coefficient(s) to convert the “strength” values to allowable stress design values of 1.7.

HISTORY NOTE APPENDIX FOR CHAPTER 6**Administrative Regulations for the Office of Statewide Health Planning and Development
(Title 24, Part 1, California Code of Regulations)**

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (OSHPD 1/96) Adoption of Chapter 6, Seismic Evaluation Procedures for Hospital Buildings, Part 1, Title 24, C.C.R. Filed with the secretary of state on April 8, 1997, effective April 8, 1997. Approved by the California Building Standards Commission on February 6, 1997.
2. (OSHPD 1/97) New Article 1-Definitions and Requirements based on SB 1953. Approved by the California Building Standards Commission on March 18, 1998. Filed with the Secretary of State on March 25, 1998, effective March 25, 1998.
3. (BSC 2/99) Article 1-7, Conflict of Interest Code. Amend Section 1-701. Approved by the Fair Political Practices Committee on October 29, 1999. Filed with the Secretary of State on December 31, 1999, effective January 30, 2000.
4. (OSHPD EF 1/00) Part 1, Chapter 6, Articles 1, 10, 11 and Appendix. Approved as submitted by the California Building Standards Commission on February 28, 2000. Filed with the Secretary of State on March 3, 2000, effective March 3, 2000. Permanent approval by California Building Standards Commission on May 24, 2000. Certification of Compliance filed with Secretary of State May 26, 2000.
5. (OSHPD EF 2/00) Part 1, Amend Chapter 6, Articles 1, 2, 10 and 11. Emergency approval by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on May 26, 2000, effective May 26, 2000. Permanent approval by California Building Standards Commission September 20, 2000. Certification of Compliance filed with Secretary of State November 15, 2000.
6. (OSHPD EF 5/01) Emergency adoption of amendments to hospital seismic safety evaluation regulations contained in Title 24, C.C.R., Part 1, Chapter 6. Approved by the California Building Standards Commission on November 28, 2001. Filed with the Secretary of State on December 4, 2001, effective December 4, 2001.
7. (OSHPD EF 01/02) Amend Chapter 6 and 7 of Part 1. Approved as emergency by the California Building Standards Commission on January 15, 2003, and filed with the Secretary of State on January 16, 2003. Effective January 16, 2003.
8. (OSHPD EF 01/02) Amend Chapters 6 and 7 of Part 1. Approved as permanent emergency by the California Building Standards Commission. Permanent approval on May 14, 2003. Certification of Compliance filed with the Secretary of State on May 15, 2003. Effective January 16, 2003.
9. (OSHPD EF 01/05) Amend Part 1, Chapter 6, Article 11 and Table 11.1. Approved as emergency by the California Building Standards Commission on December 13, 2005. Filed with the Secretary of State on December 14, 2005 with an effective date of December 14, 2005.
10. (OSHPD EF 01/05) Amend Part 1, Chapter 6, Article 11 and Table 11.1. Re-adopted/approved as emergency by the California Building Standards Commission on March 22, 2006. Filed with the Secretary of State on March 30, 2006 with an effective date of March 30, 2006.
11. (OSHPD 01/04) Amend Article 1 for nonconforming hospital buildings. Filed with Secretary of State on May 23, 2006, and effective on the 30th day after filing with the Secretary of State.
12. (OSHPD EF 01/05) Amend Title 24, Part 1, Chapter 6, Article 11 and Table 11.1. The language for the permanent rule will remain effective and unchanged from the readoption/approval of Emergency Finding (OSHPD EF 01/05) Supplement dated May 30, 2006. Approved as permanent by the California Building Standards Commission on July 27, 2006 and filed with the Secretary of State on July 28, 2006.
13. (OSHPD EF 01/07) Amend Title 24, Part 1, Chapter 6, Article 1, Article 2, Article 4, Article 6, Article 11, Table 11.1. Approved by the California Building Standards Commission on July 19, 2007. Filed with Secretary of State July 20, 2007, effective July 20, 2007.

CHAPTER 7

SAFETY STANDARDS FOR HEALTH FACILITIES

ARTICLE 1 GENERAL

7-101. Scope. The regulations in this part shall apply to the administrative procedures necessary to implement the Alfred E. Alquist Act of 1983 and to comply with State Building Standards Law.

Section 129680, Health and Safety Code, authorizes the OSHPD to enforce and amend the *California Building Standards Code* for the safety of hospitals, skilled nursing facilities and intermediate care facilities.

Unless otherwise stated, all references to sections of statute are sections found in the Health and Safety Code.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-101. Filed with the secretary of state on August 14, 1996, becomes effective September 18, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-103. Jurisdiction. The following are within the jurisdiction of Office of Statewide Health Planning and Development:

(a) For development of regulations in the *California Building Standards Code* and enforcement thereof.

1. Hospital buildings as defined by Section 129725, Health and Safety Code. Correctional Treatment Centers shall certify to the Office in compliance with Section 7-156.
2. Skilled nursing facilities as specified in paragraphs (2) and (3) of subdivision (b) of Section 129725, Health and Safety Code.
3. Intermediate care facilities as specified in paragraphs (2) and (3) of subdivision (b) of Section 129725, Health and Safety Code.

(b) For development of regulations in the *California Building Standards Code*.

1. Clinics, as defined by Section 1200 and 129725 (b) (1), Health and Safety Code, are under the jurisdiction of the local building official for enforcement, except as otherwise specified in Article 21, Section 7-2104 (d) of this chapter.

Exception: When licensed under an acute care hospital and serving more than 25 percent inpatients pursuant to Sections 129725 (b) (1) and 129730, Health and Safety Code, the Office shall retain jurisdiction for enforcement.

2. Correctional Treatment Centers, as defined by Section 129725 (b) 6, 7 (A) or 7 (B), Health and Safety Code, operated by or to be operated by a law enforcement agency of a city, county or a city and county are under the jurisdiction of the local enforcing agency for enforcement.

Correctional Treatment Centers shall certify to the Office in compliance with Section 7-156.

(c) For hospital buildings, skilled nursing facilities and intermediate care facilities, the Office shall also enforce the regulations of the *California Building Standards Code* as adopted by the Office of the State Fire Marshal and the Division of the State Architect/Access Compliance Section, for fire and life safety and accessibility compliance for persons with disabilities, respectively.

Correctional Treatment Centers shall certify to the Office in compliance with Section 7-156.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-103. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD 2/96) 1996 Annual Code Adoption Cycle will amend Section 7-103, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

7-105. Authority. (Deleted)

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to delete Section 7-105. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-107. Interpretation. No regulation shall be construed to deprive the Office of its right to exercise the powers conferred upon it by law, or to limit the Office in such enforcement as is necessary to secure safety of construction, as required by Division 107, Chapter 7 (commencing with Section 129675), Health and Safety Code.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

7-109. Application of regulations.

(a) Except as otherwise provided, these regulations and all applicable parts of the *California Building Standards Code* shall be the basis for design, plan review and observation of construction of hospital buildings, skilled nursing facilities and intermediate care facilities.

(b) Deleted.

(c) Additions, structural repairs or alterations to existing health facilities shall be made in accordance with the provisions of Part 2, Title 24, California Code of Regulations, *California Building Standards Code*.

(d) Before any health facility not previously licensed under Section 1250 of the Health and Safety Code can be licensed and used as a health facility, the applicant shall provide substantiating documentation from a structural engineer that the building is in full conformance with the requirements of the *California*

Building Standards Code for new buildings; if not, the building shall be reconstructed to conform to the requirements of the *California Building Standards Code*.

(e) Routine maintenance and repairs shall not require prior approval by the Office but shall be performed in compliance with the applicable provisions of the *California Building Standards Code*.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-109. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

ARTICLE 2 DEFINITIONS

Unless otherwise stated, the words and phrases defined in this article shall have the meaning stated therein throughout Chapter 7, Part 1, Title 24.

7-111. Definitions.

ADDITION means any work which increases the floor or roof area or the volume of enclosed space of an existing building.

ALTERATION means any change in an existing building which does not increase and may decrease the floor or roof area or the volume of enclosed space.

APPROVED PLANS AND SPECIFICATIONS means all plans, specifications, addenda, change orders and deferred approvals which have the written approval of the Office. The stamp of the Office shall not be construed to mean the written approval of plans required by Section 7-113.

ARCHITECT means a person who is certified and holds a valid license under Chapter 3 (commencing with Section 5500), Division 3, the Business and Professions Code.

ASSIGNMENT means the project scope of services, expected results, completion time and the monetary limitation for the services.

ASSOCIATED STRUCTURAL ALTERATIONS means any change affecting existing structural elements or requiring new structural elements for vertical or lateral support of an otherwise nonstructural alteration.

CANDIDATE means an applicant who is accepted by the Office as eligible to participate in a Hospital Inspector Certification Examination pursuant to the qualification criteria described in these regulations.

CIVIL ENGINEER means an engineer holding a valid license under Chapter 7 (commencing with Section 6700), Division 3, the Business and Professions Code.

CONSTRUCTION means any construction, reconstruction or alteration of, or addition or repair to any health facility.

DEFERRED APPROVALS means those portions of the construction that cannot be fully detailed on the approved plans because of variations in product design and manufacture.

DIRECTOR means the Director of the Office of Statewide Health Planning and Development or the Director's designee authorized to act in his or her behalf.

ENGINEERING GEOLOGIST means a person who is validly certified under Chapter 12.5 (commencing with Section 7800), Division 3, the Business and Professions Code, in that branch of engineering which is applicable.

FIRM includes any qualified corporation, legal entity, architect or engineer.

HEALTH FACILITY as used in this part and all applicable parts of the *California Building Standards Code* means any health facility licensed pursuant to Section 1250 of the Health and Safety Code under the jurisdiction of the Office.

(a) Hospital building includes:

1. **HOSPITAL BUILDING** as used in this part and other applicable parts of the *California Building Standards Code* means any building used for a health facility of a type required to be licensed pursuant to Section 1250 of the Health and Safety Code.
2. Except as provided in paragraph (7) of subdivision (b), hospital building includes a correctional treatment center, as defined in subdivision (j) of Section 1250, the construction of which was completed on or after March 7, 1973.

(b) **HOSPITAL BUILDING** does not include any of the following:

1. 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 State Department of Health Services.
2. Any building used, or designed to be used, for a skilled nursing facility or intermediate care facility, if the building is of single-story, wood-frame or light steel frame construction.
3. Any building of single-story, wood-frame or light steel frame construction in which only skilled nursing or intermediate care services are provided if the building is separated from a building housing other patients of the health facility receiving higher levels of care.
4. Any freestanding structures of a chemical dependency recovery hospital exempted under the provisions of subdivision (c) of Section 1275.2.
5. Any building licensed to be used as an intermediate care facility/developmentally disabled habilitative with six beds or less and any intermediate care facility/developmentally disabled habilitative of 7 to 15 beds that is a single-story, wood-frame or light-steel frame building.

6. Any building subject to licensure as a correctional treatment center, as defined in subdivision (j) of Section 1250, the construction which was completed prior to March 7, 1973.
- 7.
- A. Any building that meets the definition of a correctional treatment center pursuant to subdivision (j) of Section 1250, for which the final design documents were completed or the construction of which was begun prior to January 1, 1994, operated by or to be operated by the Department of Corrections, the Department of the Youth Authority, or by a law enforcement agency of a city, county, or a city and county.
- B. In the case of reconstruction, alteration, or addition to, the facilities identified in this paragraph, and paragraph (6) or any other building subject to licensure as a general acute care hospital, acute psychiatric hospital, correctional treatment center, or nursing facility, as defined in subdivisions (a), (b), (j) and (k) of Section 1250, operated or to be operated by the Department of Corrections, the Department of the Youth Authority, or by a law enforcement agency of city, a county, or city and county, only the reconstruction, alteration, or addition, itself, and not the building as a whole, nor any other aspect thereof, shall be required to comply with this chapter or the regulations adopted pursuant thereto.

HOSPITAL BUILDING SAFETY BOARD means the Board which shall advise the Director and, notwithstanding Health and Safety Code Section 13142.6 and except as provided in Section 18945, shall act as a board of appeals in all matters relating to the administration and enforcement of building standards relating to the design, construction, alteration and seismic safety of hospital building projects submitted to the Office pursuant to this chapter.

Further, notwithstanding Section 13142.6, the Board shall act as the board of appeals in matters relating to all fire and panic safety regulations and alternate means of protection determinations for hospital building projects submitted to the Office pursuant to this chapter.

The Board shall consist of 16 members appointed by the Director of the Office. Of the appointive members, two shall be structural engineers, two shall be architects, one shall be an engineering geologist, one shall be a geotechnical engineer, one shall be a mechanical engineer, one shall be an electrical engineer, one shall be a hospital facilities manager, one shall be a local building official, one shall be a general contractor, one shall be a fire and panic safety representative, one shall be a hospital inspector of record and three shall be members of the general public.

There shall be six ex officio members of the Board, who shall be the Director of the Office, the State Fire Marshal, the State Geologist, the Executive Director of the California Building Standards Commission, the State Director of Health Services, and the Deputy Director of the Facilities Development

Division in the Office, or their officially designated representatives.

HOSPITAL INSPECTOR means an individual who has passed the OSHPD certification examination and possesses a valid Hospital Inspector Certificate (or Construction Inspector for Health Facilities Certificate) issued by the Office.

HOSPITAL INSPECTOR OF RECORD means an individual who is:

(a) An OSHPD certified Hospital Inspector, pursuant to the provisions of these regulations and

(b) Employed by the hospital governing board or authority and

(c) Approved by the architect and/or engineer in responsible charge and the Office as being satisfactory to inspect a specified construction project.

LICENSE means the basic document issued by the Department of Health Services permitting the operation of a health facility under the provisions of Title 22, California Code of Regulations, Division 5.

LOCAL GOVERNMENT ENTITY means a building department of a city, city and county, or county.

MINORITY, WOMEN AND DISABLED VETERAN BUSINESS ENTERPRISE shall have the respective meanings set forth in Section 10115.1 of the Public Contract Code.

NONREQUIRED STRUCTURAL ALTERATION means any alteration of existing structural elements or provision of new structural elements which is not necessary for vertical or lateral support of other work and is initiated by the applicant primarily for the purpose of increasing the vertical or lateral load carrying strength or stiffness of an existing building.

NONSTRUCTURAL ALTERATION means any alteration which neither affects existing structural elements nor requires new structural elements for vertical or lateral support and which does not increase the lateral force in any story by more than five percent.

OFFICE means the Facilities Development Division within the Office of Statewide Health Planning and Development.

PRIMARY GRAVITY LOAD RESISTING SYSTEM (PGLRS) means assembly of structural elements in the building that resists gravity loads, including floor and roof beams/girders supporting gravity loads or any other members designed to support significant gravity loads. Foundations supporting loads from the PGLRS shall be considered part of the PGLRS.

RECONSTRUCTION means the rebuilding of any "existing building" to bring it into full compliance with these regulations and all applicable parts of the *California Building Standards Code*.

SEISMIC FORCE RESISTING SYSTEM (SFRS) means assembly of structural elements in the building that resists seismic loads, including struts, collectors, chords, diaphragms and trusses. Foundations supporting loads from the SFRS shall be considered part of the SFRS.

SITE DATA means reports of investigation into geology, earthquake ground motion and geotechnical aspects of the site of a health facility construction project.

SMALL BUSINESS means a firm that complies with the provisions of Government Code Section 14837.

STRUCTURAL ELEMENTS means floor or roof diaphragms, decking, joists, slabs, beams or girders; columns; bearing walls; retaining walls; masonry or concrete nonbearing walls exceeding one story in height; foundations; shear walls or other lateral force resisting members; and any other elements necessary to the vertical and lateral strength or stability of either the building as a whole or any of its parts including connections between such elements.

STRUCTURAL ENGINEER means a person who is validly certified to use the title structural engineer under Chapter 7 (commencing with Section 6700), Division 3, the Business and Professions Code.

STRUCTURAL REPAIRS means any change affecting existing or requiring new structural elements primarily intended to correct the effects of deterioration or impending or actual failure, regardless of cause.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-111. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.
2. (OSHPD 1/96) 1996 Annual Code Adoption Cycle will amend Section 7-111, of Part 1, Title 24, C.C.R. Filed with the secretary of state on March 4, 1997; effective April 3, 1997. Approved by the California Building Standards Commission on February 6, 1997.

ARTICLE 3

APPROVAL OF PLANS AND SPECIFICATIONS

7-113. Application for plan, report or seismic compliance extension review.

(a) Except as otherwise provided in this part, before commencing construction or alteration of any health facility, the governing board or authority thereof shall submit an application for plan review to the Office, and shall obtain the written approval thereof by the Office describing the scope of work included and any special conditions under which approval is given.

1. The application shall contain a definite identifying name for the health facility, the name of the architect or engineer of record who is in general responsible charge of the work, the names of the architects or registered engineers responsible for the preparation of portions of the work, the estimated cost of the project and all such other information required for completion of the application. Refer to Section 7-131 regarding incremental design, bidding and construction.
2. Submission of documents to the Office may be in three consecutive stages:
 - A. Geotechnical Review: One application for plan review and, when applicable, three copies of the site data must be attached.

B. Preliminary Review: One copy of reports or preliminary plans and outline specifications. Two copies of preliminary plans and outline specifications must be submitted if additions, structural alterations or new buildings are included. Plans/drawings size shall not exceed 36 × 48 inches, and bundled sets of plans/drawings shall not exceed 40 lbs in weight.

C. Final Review: One copy of final plans and specifications or reports. Two copies must be submitted if additions, structural alterations or new buildings are included. Plans/drawings size shall not exceed 36 × 48 inches, and bundled sets of plans/drawings shall not exceed 40 lbs in weight.

(b) Application for seismic compliance extension requires submission of OSHPD Application Form #OSH-FD-384, "Application for 2008 Extension/Delay in Compliance." The submittal must comply with the applicable requirements of Chapter 6, Article 1, Section 1.5.2 "Delay in Compliance."

(c) For every project there shall be an architect or engineer of record in general responsible charge of reviewing and coordinating all submittals, except as set forth in Section 7-115(c).

1. A project may be divided into parts, provided that each part is clearly defined by a building or similar distinct unit. The part, so defined, shall include all portions and utility systems or facilities necessary to the complete functioning of that part. Separate assignments of architect or engineer of record may be made for the parts.

(d) The assignment of architect or engineer of record, and the responsibility for the preparation of plans and specifications and the administration of the work of construction for portions of the work shall be clearly designated on the application for approval of reports or plans and specifications.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129850.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-113. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-115. Preparation of plans and specifications and reports.

(a) All plans and specifications or reports, except as provided in (c) below shall be prepared under the general responsible charge of an architect or engineer of record. Prior to submittal to the office, the architect or engineer of record for a project shall sign every sheet of the drawings, and the title sheet, cover sheet or signature sheet of specifications and reports. A notation may be provided on the drawings indicating the architect's or engineer's role in preparing and reviewing the documents. Plans/drawings submitted to the office shall not exceed the size and weight described in Section 7-113 (a) (2).

1. Except as provided in paragraph 2 below, the architect or engineer of record in general responsible charge of the work shall be an architect or structural engineer.
2. For the purposes of this section, a mechanical, electrical or civil engineer may be the engineer of record in general responsible charge of alteration or repair projects that do not affect architectural or structural conditions,

and where the work is predominately of the kind normally performed by mechanical, electrical or civil engineers.

3. Preparation of plans and specifications and administration of the work of construction for designated portions of the work may be performed by other architects and/or engineers as provided in (b) below. Preparation of portions of the work by others shall not be construed as relieving the architect or engineer of record of his rights, duties and responsibilities under Section 129805 of the Health and Safety Code.

(b) Architects or engineers registered in the appropriate branch of engineering may be responsible for the preparation of plans and specifications and administration of the work of construction as permitted by their license or registration, and as provided below. Architects and engineers shall sign and affix their professional stamp to all drawings, specifications or reports that are prepared under their responsible charge. All plans shall be signed and stamped prior to issuance of a building permit.

1. The structural plans and specifications or reports shall be prepared under the responsible charge of a structural engineer.
2. A mechanical or electrical engineer may prepare plans, specifications or reports for projects where the work is predominately of the kind normally prepared by mechanical or electrical engineers.
3. A civil engineer may prepare plans specifications or reports for the anchorage and bracing of nonstructural equipment.

(c) A licensed specialty contractor may prepare plans and specifications and may administer the work of construction for health facility construction projects, subject to the following conditions:

1. The work is performed and supervised by the licensed specialty contractor who prepares the plans and specifications,
2. The work is not ordinarily within the standard practice of architecture and engineering,
3. The project is not a component of a project prepared pursuant to 7-115 (a) and (b),
4. The contractor responsible for the design and installation shall also be the person responsible for the filing of reports, pursuant to Section 7-151, and
5. The work is limited to one of the following types of projects:
 - A. Fire protection systems where none of the fire sprinkler system piping exceeds 2¹/₂ inches (63.5 mm) in diameter.
 - B. Low voltage systems not in excess of 91 volts. These systems include, but are not limited to, telephone, sound, cable television, closed circuit video, nurse call systems and power limited fire alarm systems.
 - C. Roofing contractor performing reroofing where minimum ¹/₄ inch (6.4 mm) on 12 inch (305 mm) roof slopes are existing and any roof mounted

equipment needing remounting does not exceed 400 pounds.

- D. Insulation and acoustic media not involving the removal or penetration of fire-rated walls, or ceiling and roof assemblies.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129850.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-115. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-117. Site data.

(a) The site data reports shall be required for all proposed construction except:

1. As provided in Part 2, Title 24.
2. One-story, wood-frame or light steel frame buildings of Type II or V construction and 4,000 square feet or less in floor area not located within Earthquake Fault Zones or Seismic Hazard Zones as shown in the most recently published maps from the California Geological Survey (CGS).
3. Nonstructural alterations.
4. Structural repairs for other than earthquake damage.
5. Incidental structural additions or alterations.

(b) Three copies of site data reports shall be furnished to the Office for review and evaluation prior to the submittal of the project documents for final plan review. Site data reports shall comply with the requirements of these regulations and Part 2, Title 24. Upon the determination that the investigation of the site and the reporting of the findings was adequate for the design of the project, the Office will issue a letter stating the site data reports are acceptable.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7.117. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-121. Preliminary plans and outline specifications.

(a) One copy of the preliminary plans and outline specifications shall be submitted to the Office. Two copies must be submitted if additions, structural alterations or new buildings are included. If applicable, each of the site data reports listed in Section 7-117 (a) 1 shall have been submitted previously. The preliminary design documents will be reviewed by the Office for compliance with Titles 19 and 24, California Code of Regulations. These documents shall provide the following data:

(b) Architectural, structural or other plans shall include:

1. Plot plan showing roads, fire flow supply and demand calculations, fire hydrants, courses and distances of property lines, existing buildings, proposed buildings, parking areas, sidewalks, topography and any easements of record.

2. Plans of basement, other floors or levels and roof which indicate:
 - A. The function, occupancy or usage of each room, area or space. Floor plans for addition or alteration projects shall be accompanied by floor plans of the existing buildings showing the existing space usages.
 - B. The size and location of each fixed equipment item as follows:
 - (1) Fixed building service equipment which includes utility systems and machinery necessary for the effective functioning of the building such as heating, ventilating, air conditioning, elevators and communications.
 - (2) Other fixed equipment permanently fastened to the building or the ground which are required for the program function of the building.
 3. Provisions for meeting the fire and life safety requirements in Titles 19 and 24, either on preliminary plans or in outline specifications. At least the following shall be indicated:
 - A. Compartment of the buildings.
 - B. Door swings and corridor widths.
 - C. Enclosures of stairwells and elevator shafts.
 - D. Location of fire alarm components, to include fire zones.
 - E. Extent of fire sprinkler coverage.
 4. Assembly ratings as specified by the Underwriter's Laboratories, Inc., or other nationally recognized testing laboratories.
 5. Provisions for making facilities accessible to and usable by persons with disabilities in conformance with the *California Building Standards Code*, Title 24, California Code of Regulations.
- (c) Mechanical plans shall include:
1. Single line layouts of major ducts and piping systems.
 2. Location and layout of boiler room or space and major associated equipment and central heating, cooling and ventilating units.
 3. Fire dampers, smoke dampers and other fire safety items required by Titles 19 and 24, California Code of Regulations.
 4. Riser diagrams for multistory construction.
- (d) Electrical plans shall include:
1. Plans showing space assignment.
 2. Sizes and outline of fixed equipment, such as transformers, main switch gear, switch boards and generator sets.
 3. Simple riser diagrams for multistory construction showing arrangements of feeders and branch circuit panels.
 4. Simplified single-line diagram(s).

5. Fire detector locations, exit and emergency lights and fire alarms systems required in Titles 19 and 24, California Code of Regulations.

(e) Outline specifications shall include:

1. A general description of the construction, including interior finishes, types and location of acoustical material and special floor coverings.
2. A description of the plumbing, air conditioning, heating and ventilation systems, including controls, ducts and piping for all areas.
3. A general description of electrical services including voltage, number and location of feeders whether overhead or underground. A specific description of items to be served by emergency power and description of design considerations for special areas, such as anesthetizing locations and critical care areas.
4. All fire and life safety items shown on the preliminary plans. These items shall include the flame spread rating of all applicable materials and finishes and a description of mechanical and electrical devices required for the intended occupancy of the building.

(f) Acceptance of preliminary plans and outline specifications.

Upon completion of the review of the preliminary plans and outline specifications, the Office will return a marked-up set of the plans and specifications or a written report to the applicant indicating any items that need correction or clarification.

At the time the final plans and specifications are submitted to the Office, the marked-up copies of the preliminary plans and specifications shall accompany the other documents being filed.

Authority: Health and Safety Code Sections 127015 and 129850.

Reference: Health and Safety Code Sections 129675–129998.

HISTORY:

1. (OSHPD 2/95) Regular order by the Office of Statewide Health Planning and Development to amend Section 7-121. Filed with the secretary of state on August 14, 1996, becomes effective September 13, 1996. Approved by the California Building Standards Commission on March 19, 1996.

7-125. Final review of plans and specifications.

(a) One copy of the final plans and specifications and site data reports shall be submitted to the Office.

1. Two copies must be submitted if additions, structural alterations or new buildings are included.
2. The plans and specifications shall include: architectural, mechanical, electrical, structural seismic restraint, and fire and life safety details.

(b) Plans and specifications are to be completely and thoroughly checked by the responsible architect or engineer before submission to the Office. Plans and specifications which are incomplete or incorrect will be returned to the applicant.

1. Where a portion of the construction cannot be fully detailed on the approved plans because of variations in product design and manufacture, the approval of the plans for such portion may be deferred until the mate-

rial suppliers are selected provided the following conditions are met:

- A. The plans clearly indicate that a deferred approval by the Office is required for the indicated portions of the work prior to fabrication and installation.
- B. The plans and specifications fully describe the performance and loading criteria for such work.
- C. The deferred approval submittals are made in conformance with Section 7-153.

Exception: Seismic Force Resisting System (SFRS), Primary Gravity Load Resisting System (PGLRS) and stairs shall not be deferred.

- 2. Due to the difficulty of anticipating every unsatisfactory condition that might exist in connection with the existing work where alteration or reconstruction work is proposed, the following clause or one of similar meaning shall be included in all specifications to which the Office gives approval in connection with either reconstruction or alteration work: "The intent of the plans and specifications is to reconstruct the hospital building in accordance with the *California Building Standards Code*, Titles 19 and 24, California Code of Regulations. Should any conditions develop not covered by the approved plans and specifications wherein the finished work will not comply with Title 24, California Code of Regulations, a change order detailing and specifying the required work shall be submitted to and approved by the Office before proceeding with the work."

(c) Final plans and specifications, and site data reports, except those items specified in Section 7-117 (a), shall be submitted to the Office for review and shall include the following:

- 1. Site data reports as previously accepted by the Office pursuant to Section 7-117 shall be included with the plans and specifications.
- 2. Architectural plans shall include, where applicable:
 - A. Plot plan.
 - B. Floor plans.
 - C. Reflected ceiling plans.
 - D. Roof plans.
 - E. Elevations and sections.
 - F. Necessary details.
 - G. Schedule of finishes, doors and windows.
 - H. Exit system.
 - I. Fire and smoke wall locations.
 - J. Occupancy separations and indicate different occupancies.
 - K. Location and identifying data on major items of movable equipment and fixed hospital equipment; e.g., autoclaves, sterilizers, kitchen equipment, laboratory equipment, X-ray equipment, cabinets and storage racks.
 - L. Anchorage of all equipment items shall be detailed.

Exceptions:

- 1. Equipment weighing less than 400 pounds supported directly on the floor or roof.
 - 2. Furniture.
 - 3. Temporary or movable equipment.
 - 4. Equipment weighing less than 20 pounds supported by vibration isolators.
 - 5. Equipment weighing less than 20 pounds suspended from a roof or floor or hung from a wall.
- M. Fire extinguishers.
3. Structural plans shall include, where applicable:
- A. Plans of foundations, floors, roofs and any intermediate levels showing a complete design with sizes, sections and relative location of the various members and a schedule of beams, girders and columns. Assumed soil bearing pressures and type of material shall be shown on foundation plans.
 - B. Details of all connections, assemblies and expansion joints.
 - C. Details of structural framing systems necessary for support and seismic bracing of major nonstructural elements and items of major fixed building equipment and hospital equipment.

Exceptions:

- 1. Equipment weighing less than 400 pounds supported directly on the floor or roof.
 - 2. Furniture.
 - 3. Temporary or movable equipment.
 - 4. Equipment weighing less than 20 pounds supported by vibration isolators.
 - 5. Equipment weighing less than 20 pounds suspended from a roof or floor or hung from a wall.
- D. Structural plans shall be accompanied by computations, stress diagrams and other pertinent data and shall be complete to the extent that calculations for individual structural members can be readily interpreted.

The computations shall be prefaced by a statement clearly and concisely outlining the basis for the structural design and indicating the manner in which the proposed hospital building will resist vertical loads and horizontal forces. The computations shall be sufficiently complete to establish definitely that the structure will resist the loads and forces prescribed by these rules and regulations. Assumed safe bearing pressures on soils and ultimate strengths of concrete shall be given in computations and noted on plans. Where unusual conditions occur, such additional data as are pertinent to the work shall be submitted.

- 4. Mechanical plans shall include, where applicable:
 - A. Radiators and steam-heated equipment, such as sterilizers, autoclaves, warmers and steam tables.

- B. Heating and steam mains, including branches with pipe sizes.
- C. Pumps, tanks, boiler breaching and piping, and boiler room accessories.
- D. Air conditioning systems with refrigeration equipment, water and refrigerant piping, and ducts.
- E. Exhaust and supply ventilating systems showing duct sizes with steam or water connections and piping.
- F. Size and elevation of street sewer, house sewer, house drains, street water main and water service into the building.
- G. Location and size of soil, waste and vent stacks with connections to house drains, fixtures and equipment.
- H. Size and location of hot, cold and circulation water mains, branches and risers from the service entrance, and tanks.
- I. Riser diagram or other acceptable method to show all plumbing stacks with vents, water risers and fixture connections for multistory buildings.
- J. Medical gas and special connections.
- K. Fire extinguishing equipment such as fixed extinguishing systems, sprinklers, and wet and dry standpipes.
- L. Plumbing fixtures and fixtures which require water and drain connections.
- M. Anchorage of all equipment shall be detailed.

Exceptions:

1. Equipment weighing less than 400 pounds supported directly on the floor or roof.
 2. Furniture.
 3. Temporary or movable equipment.
 4. Equipment weighing less than 20 pounds supported by vibration isolators.
 5. Equipment weighing less than 20 pounds suspended from a roof or floor or hung from a wall.
5. Electrical plans shall include, where applicable:
- A. Electrical service entrance equipment.
 - B. Transformers and their connections, if located in the building or on the site.
 - C. Main switchboard, distribution panels, lighting and appliance panels, motor control centers and associated equipment.
 - D. Feeder size including conductors, conduit and over current protection.
 - E. Lighting and appliance outlets, receptacles, switches and circuitry.
 - F. Telephone layout.
 - G. Nurses' call system.
 - H. Fire alarm systems.

- I. Emergency electrical system, when required.
- J. Switchboard and panel schedules with tabulated loads.
- K. Single-line diagram(s).
- L. Anchorage of all equipment shall be detailed.

Exceptions:

1. Equipment weighing less than 400 pounds supported directly on the floor or roof.
 2. Furniture.
 3. Temporary or movable equipment.
 4. Equipment weighing less than 20 pounds supported by vibration isolators.
 5. Equipment weighing less than 20 pounds suspended from a roof or floor or hung from a wall.
6. Architectural, structural, mechanical and electrical specifications which fully describe, except where fully indicated and described on the plans, the materials, workmanship and the kind, sizes, capacities, finishes and other characteristics of all materials, products, articles and devices.
7. Additions to or alterations and repairs of existing structures which include:
- A. Types of activities within the existing buildings, including distribution.
 - B. Type of construction of existing buildings and number of stories.
 - C. Plans and details showing attachment of new construction to existing structural, mechanical and electrical systems.
8. A title block or strip on each sheet of the construction document plans shall include the following:
- A. Name and address of the architect or engineer.
 - B. Name and address of the project.
 - C. Number or letter of each sheet.
 - D. Date of preparation of each sheet and the date of revision, if any.
 - E. The scale of each plan or detail.
9. The north point of reference and the location or reference dimensions of the building, with respect to the site boundaries and property lines, shown on all plot plans and on all floor plans where applicable.

(d) After the Office has made its check of the submitted documents, the marked-up set of plans and specifications will be returned to the architect or engineer. A set of prints from corrected plans and specifications shall be filed for recheck when the original check indicates that extensive changes are necessary. Where necessary corrections are of minor nature, corrected original plans and specifications may be filed for recheck. Changes in plans and specifications, other than changes necessary for correction, made after submission for approval, shall be brought to the attention of the Office in writing or by submission of revised plans and specifications identi-

fyng those changes. Failure to give such notice voids any subsequent approval given to the plans and specifications.

The Office places its stamp on the original reproducible plans and the master cover sheet of the specifications when they have been corrected to comply with these regulations. This stamp is affixed for identification only and must not be construed as “written approval of plans” required in Section 129810 of the Health and Safety Code.

The prints, specifications, computations and other data filed with the application are the property of, and are retained by, the Office.

(e) The architect or engineer shall submit to the Office a set of plans and specifications bearing the identification stamp of the Office. Upon receipt of this set, the Office shall provide written approval of the plans and specifications.

Any changes made to the approved plans or specifications shall be made in accordance with Section 7-153. Any change,

(TEXT CONTINUES ON PAGE 117)

threatened act of violence including any forceful detention, which results or threatens to result in physical or mental injury. Rape, molestation, incest (if the victim is a minor) or forced prostitution shall be considered acts of violence.

B. There is a substantial connection between such battery or cruelty and the need for the benefits to be provided in the opinion of the Office of Statewide Health Planning and Development. For purposes of this subsection, the following circumstances demonstrate a substantial connection between the battery or cruelty and the need for the benefits to be provided:

- (1) The benefits are needed to enable the alien child's parent to become self-sufficient following separation from the abuser.
- (2) The benefits are needed to enable the alien child's parent to escape the abuser and/or the community in which the abuser lives, or to ensure the safety of the alien child's parent from the abuser.
- (3) The benefits are needed due to a loss of financial support resulting from the alien child's parent's separation from the abuser.
- (4) The benefits are needed because the battery or cruelty, separation from the abuser, or work absences or lower job performance resulting from the battery or extreme cruelty or from legal proceedings relating thereto (including resulting child support, child custody and divorce actions) cause the alien child's parent to lose his or her job or to earn less or to require the alien child's parent to leave his or her job for safety reasons.
- (5) The benefits are needed because the alien child's parent requires medical attention or mental health counseling, or has become disabled, as a result of the battery or extreme cruelty.
- (6) The benefits are needed because the loss of a dwelling or source of income or fear of the abuser following separation from the abuser jeopardizes the alien child's parent's ability to care for his or her children (e.g., inability to house, feed or clothe children or to put children into a day care for fear of being found by the abuser).
- (7) The benefits are needed to alleviate nutritional risk or need resulting from the abuse or following separation from the abuser.
- (8) The benefits are needed to provide medical care during pregnancy resulting from the abuser's sexual assault or abuse of, or relationship with, the alien child's parent and/or to care for any resulting children.
- (9) Where medical coverage and/or health care services are needed to replace medical coverage or

health care services the alien child's parent had when living with the abuser.

C. The alien meets the requirements of 3H(3) above.

(d) For purposes of this section, "nonimmigrant" is defined the same as in Section 101(a)(15) of the INA [8 U.S.C. § 1101(a) (15)].

(e) For purposes of establishing eligibility for "Certification and Approval of Hospital Inspectors" examination, as authorized by Sections 1275, 127010, 127015, 129689 and 129825 of the Health and Safety Code, all of the following must be met:

1. The applicant must declare himself or herself to be a citizen of the United States, a qualified alien under subsection (c), a nonimmigrant alien under subsection (d), or an alien paroled into the United States for less than one year under Section 212 (d)(5) of the INA [8 U.S.C. § 1182(d) (5)]. The applicant shall declare that status through use of a form provided by the Office of Statewide Health Planning and Development.
2. The applicant must present documents of a type acceptable to the Immigration and Naturalization Service (INS) which serve as reasonable evidence of the applicant's declared status. A fee receipt from the INS for replacement of a lost, stolen or unreadable INS document is reasonable evidence of the alien's declared status.
3. The applicant must complete and sign the form provided by the Office of Statewide Health Planning and Development.
4. Where the documents presented do not on their face appear to be genuine or to relate to the individual presenting them, the government entity that originally issued the documents should be contacted for verification. With regard to naturalized citizens and derivative citizens presenting certificates of citizenship and aliens, the INS is the appropriate government entity to contact for verification. The Office of Statewide Health Planning and Development should request verification from the INS by filing INS Form G-845 with copies of the pertinent documents provided by the applicant with the local INS office. If the applicant has lost his or her original documents or presents expired documents or is unable to present any documentation evidencing his or her immigration status, the applicant should be referred to the local INS office to obtain the proper documentation.
5. The type of documentation referred to the INS for verification pursuant to INS Form G-845 shall include the following:
 - A. The document presented indicates immigration status but does not include an alien registration or alien admission number.
 - B. The document is suspected to be counterfeit or to have been altered.
 - C. The document includes an alien registration number in the A6 000 000 (not yet issued) or A80 000 000 (illegal border crossing) series.

D. The document is one of the following: an INS Form I-181b notification letter issued in connection with an INS Form I-181b Memorandum of Creation of Record of Permanent Residence, an Arrival-Departure Record (INS Form I-94) or a foreign passport stamped “PROCESSED FOR I-551, TEMPORARY EVIDENCE OF LAWFUL PERMANENT RESIDENCE” that INS issued more than one year before the date of application for the Hospital Inspector Certification exam.

6. If the INS advises that the applicant has citizenship status or immigration status which makes him or her a qualified alien under the PRWORA, the INS verification should be accepted. If the INS advises that it cannot verify that the applicant has citizenship status or an immigration status that makes him or her a qualified alien, benefits should be denied and the applicant notified pursuant to the Hospital Inspector Certification Examination regular procedures of his or her rights to appeal the denial of benefits.

(f) Pursuant to Section 434 of the PRWORA (8 U.S.C. § 1644), where the Office of Statewide Health Planning and Development reasonably believes that an alien is unlawfully in the state based on the failure of the alien to provide reasonable evidence of the alien’s declared status, after an opportunity to do so, said alien shall be reported to the Immigration and Naturalization Service.

(g) Provided that the alien has completed and signed the form provided by the Office of Statewide Health Planning and Development under penalty of perjury, eligibility for the Hospital Inspector Certification Examination shall not be delayed, denied, reduced or terminated while the status of the alien is verified.

(h) Pursuant to Section 432(d) of the PRWORA [8 U.S.C. §1642 (d)], a nonprofit charitable organization that provides federal, state or local public benefits shall not be required to determine, verify or otherwise require proof of eligibility of any applicant or beneficiary with respect to his or her immigration status or alienage.

(i) Any applicant who is determined to be ineligible pursuant to subsections (b) and (e) or who was made eligible for the Hospital Inspector Certification Examination, whose services are terminated, suspended or reduced pursuant to subsections (b) and (e), is entitled to an appeal, pursuant to Section 7-215 of Article 19, Chapter 7, Part 1.

Authority: Health and Safety Code Sections 18929 and 129675 - 130070.

Reference: Health Safety Code Section 129825 and 8 U.S.C. §1621, 1641 and 1642.

ARTICLE 20 REPAIR OF EARTHQUAKE DAMAGE

7-300. Plan review and approval.

(a) All repair projects are subject to prior plan review, plan approval and construction permit by the Office except as noted in subsection (b).

(b) For emergency repairs carried out without the Office plan review and permit the aftermath of an earthquake, an application for plan review must be submitted with construction documents, fees and a letter of transmittal stating the reasons for emergency repairs. Photographs, if available, and reports of damage and repairs should also be submitted with the application. Additional repairs may be required if the emergency repairs do not comply with the code. For alternate fee payment methodology, see Section 129787 of the Health and Safety Code.

(c) Plan reviews for earthquake damage repairs will be performed on a priority basis. The application for plan review should clearly state that the scope of the project is to repair the damage from the earthquake. Where possible, reviews will be made over the counter.

(d) Plan review fees shall be payable for all damage repair projects per the following:

1. 1.64 percent of estimated construction costs for hospitals.
2. 1.50 percent of estimated construction cost for skilled nursing facilities (SNF) or intermediate care facilities (ICF).
3. For alternate fee payment methodology, see Section 129787 of the Health and Safety Code.
4. An examination fee where review of existing plans is required. The fee will be calculated on a time and material basis at the prevailing hourly rates applicable for the review personnel.

(e) Office recommends predesign conference with architects/ engineers to resolve code issues relevant to the repair projects.

Authority: Health and Safety Code Section 129850.

Reference: Health and Safety Code Sections 129785, 129787 and 129820.

7-301. Appeals. The Hospital Building Safety Board shall act as a board of appeals with regard to disagreements between the Office and hospital/SNF/ICF authorities on interpreting the repair policy or the establishment of the degree of damage. (Section 7-159 of Administrative Regulations for the Office)

Authority: Health and Safety Code Section 129850.

Reference: Health and Safety Code Section 129925.

7-302. Pre-1973 structures. These hospital buildings were approved for construction by local building departments prior to March 7, 1973.

(a) All structural repairs shall be made to conform to vertical load requirements of the *California Building Code (CBC)*.

(b) Where lateral load resisting capacity of the building at any level is reduced by 5 percent or less due to earthquake damage, the repairs may be made with the same construction as before, subject to structural detailing requirements of the CBC.

(c) Where lateral load resisting capacity of the building at any level is reduced by more than 5 percent but not more than 10 percent due to earthquake damage, the repairs shall be made in accordance with Section 3411A.3.2.2 of the CBC.

(d) Where lateral load resisting capacity of the building at any level is reduced by more than 10 percent due to earthquake

damage, the repairs shall be made such that the primary structural system and the seismic bracing of other components and systems shall conform to the requirements of Section 3411.A.3.2.3 of the CBC.

(e) Where earthquake repairs consist of alterations which involve removal of one or more entire stories, permission for repairs will be granted if lateral load resisting capacity of the remaining structure is not reduced (Section 3411.A.3.2.4, CBC).

(f) Repair/reconstruction of structures should comply with the design and detailing requirements of engineering materials stated in Chapters 19A, 20, 21A, 22A and 23 as applicable and applicable fire-resistive requirements of the CBC.

(g) Epoxy injection repairs shall require submittal of backup information per Section 104.11, Appendix Chapter 1 of the CBC.

(h) Repair of damage to seismic anchorage of equipment and nonstructural items shall comply with Section 3403A.2.3 of the CBC.

Authority: Health and Safety Code Section 129850.

Reference: Health and Safety Code Section 129725.

7-303. Post-1973 structures. These hospital structures were approved for construction by the Office of the State Architect or Office after March 7, 1973. They are also referred to in the regulations as approved existing buildings.

(a) Repairs to the damage shall be made to restore the load carrying capacities of the affected elements per Section 3411.A.3.1 of the CBC.

(b) Repair of damage to seismic anchorage of equipment and nonstructural items shall comply with Section 3403A.2.3 of the CBC.

Authority: Health and Safety Code Section 129850.

Reference: Health and Safety Code Section 129725.

7-304. Type V Single-story SNF or ICF.

(a) All structural repairs shall be made to conform to vertical load requirements of the CBC.

(b) Repair of damage of seismic anchorage of equipment shall comply with the CBC.

(c) Where damage has reduced the lateral load capacity by more than 10 percent in any one line of the lateral force resisting system in the building, repairs of structural elements shall conform to Section 3403.2.3 of the CBC.

Authority: Health and Safety Code Section 129850.

Reference: Health and Safety Code Section 129875.

7-305. All hospital buildings.

(a) Where architectural, mechanical, electrical, fire and life safety systems and components damaged by the earthquake are to be replaced, new systems and components shall comply with the current applicable Title 24 codes where practicable in consultation with the Office.

(b) Where the repairs to earthquake damage are required in accordance with Section 7-302 or 7-303, hospital facilities may reopen, after temporary repairs, for a limited period of time subject to the following:

1. **Temporary repairs:** The hazard resulting from damage to the facility is abated and the facility is at least restored to its pre-earthquake condition or its equivalent.

2. **Permanent repairs/retrofit:** The hospital successfully negotiates with the Office a time bound plan for the permanent repairs/retrofit of the damaged facilities required by these regulations.

Authority: Health and Safety Code Section 129850.

Reference: Health and Safety Code Sections 129725 and 129820.

HISTORY:

1. (OSHPD/EF 1/91) Emergency order by the Office of Statewide Health Planning and Development to amend Section 7-133, Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state September 25, 1991; effective September 25, 1991. Approved as an emergency by the California Building Standards Commission on September 20, 1991.
2. (OSHPD/EF 1/91) Permanent order by the Office of Statewide Health Planning and Development to amend Section 7-133, Part 1, Title 24, California Code of Regulations. Filed as a permanent order with the secretary of state February 25, 1992; effective September 25, 1991. Approved as an emergency by the California Building Standards Commission on February 24, 1992.
3. (OSHPD/EF 1/92) Emergency order by the Office of Statewide Health Planning and Development to amend Sections 7-111 and 7-191, Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state September 1, 1992; effective September 1, 1992. Approved as an emergency by the California Building Standards Commission on August 27, 1992.
4. (OSHPD/EF 1/92, permanent) Emergency order by the Office of Statewide Health Planning and Development to amend Sections 7-111 and 7-191, Part 1, Title 24, California Code of Regulations. Filed as a permanent order with the secretary of state on March 9, 1993; effective March 9, 1993. Approved as a permanent order by the California Building Standards Commission on March 5, 1993.
5. (OSHPD/EF 1/95) Emergency order by the Office of Statewide Health Planning and Development to add Sections 7-300 through 7-305, Part 1, Title 24, California Code of Regulations. Filed as an emergency order with the secretary of state on September 8, 1995; effective September 8, 1995. Approved as an emergency by the California Building Standards Commission on September 7, 1995.
6. (OSHPD/EF 1/95, permanent) Emergency order by the Office of Statewide Health Planning and Development to add Sections 7-300 through 7-305, Part 1, Title 24, California Code of Regulations. Filed as a permanent order with the secretary of state on November 30, 1995. Since there were no changes, effective date remains September 8, 1995.

ARTICLE 21 PLAN REVIEW, BUILDING INSPECTION AND CERTIFICATION OF SURGICAL CLINICS, CHRONIC DIALYSIS CLINICS AND OUTPATIENT SERVICES CLINICS

7-2100. Scope of responsibilities.

(a) Except as otherwise provided in these regulations, a city or county building jurisdiction shall be responsible for plan review and building inspection of new construction or alteration of clinic facilities specified in 7-2100 (a) (1), (2), (3) and (4) and shall also provide certification that the clinic facilities identified in 7-2100 (a) (1), (2) and (3) are in conformance with the applicable clinic provisions in the latest edition of the *California Building Standards Code*. For clinic facilities identified in 7-2100 (a) (1), (2) or (3), construction or alteration shall include buildings converted to the specific purpose.

1. Surgical clinic as defined in Health and Safety Code, Section 1204 (b) (1).
2. Chronic dialysis clinic as defined in Health and Safety Code, Section 1204 (b) (2).
3. Surgical and/or chronic dialysis clinic building which is freestanding from a building where hospital services are provided and as defined in Health and Safety Code, Section 129725 (b) (1).

4. Any building where hospital outpatient clinical services are provided that is freestanding from a hospital building, as defined in Health and Safety Code, Section 129725 (a), except those buildings identified in 7-2100 (a) (3).

(b) The city or county shall not establish or apply building standards for the construction or alteration of hospital licensed freestanding clinics, as described in Section 7-2100 (a) (3) and (4), which are more restrictive or comprehensive than comparable building standards established or applied to clinic facilities which are not hospital licensed pursuant to Health and Safety Code, Chapter 1 (commencing with Section 1200) of Division 2.

Authority: Health and Safety Code Sections 18929 and 129675–130070.

Reference: Health and Safety Code Section 129885.

7-2101. Surgical clinic and chronic dialysis clinic project submittal to the local building jurisdiction.

(a) The governing authority or owner of a clinic, as described in Section 7-2100 (a) 1 and 2, shall submit construction plans to the city or county, as applicable, for plan review, building inspection and certification. Certification by the local building jurisdiction shall indicate that the project clinic is in conformance with the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

Exception: Notwithstanding Section 7-2100 (a) (1) and (2), the governing authority or owner may request the Office to perform the plan review and certification, pursuant to Section 7-2102.

(b) Upon the clinic's initial submittal of project plans, the city or county shall advise the governing authority or owner, in writing, of its decision that plan review services will either include certification or not include certification.

(c) If the city or county indicates to the governing authority or owner that it will include certification with plan review of the specified clinic project, the city or county shall:

1. Review plans to all applicable provisions in the latest edition of the *California Building Standards Code* and;
2. Provide written certification to the applicant within 30 days of completion of construction that the applicable clinic provisions have been met.

(d) If the city or county indicates to the applicant that it will not include certification with plan review of the specified clinic project, the city or county shall review the plans to the provisions of the latest edition of the *California Building Standards Code*, excluding the clinic provisions. The governing authority or owner shall also submit the following items to the Office:

1. A completed application, design plans and specifications for the clinic project, pursuant to Section 7-113, and;
2. A fee, pursuant to Section 7-2106.

(e) The Office shall review the plans and specifications to determine whether or not the clinic project meets the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

(f) Upon completion of plan review and receipt of all applicable fees, the Office shall provide the clinic applicant with

written certification that the project design plans and specifications meet the clinic provisions in the latest edition of the *California Building Standards Code*.

(g) Building construction inspection for the clinic project shall be performed by the local jurisdiction.

7-2102. Request for the office to provide plan review for surgical clinics and chronic dialysis clinics.

(a) If the governing authority or owner of a clinic, as described in Section 7-2100 (a) (1) or (2), elects to request the Office to provide plan review services for a clinic project, in lieu of the city or county, the request shall be submitted to the Office in writing. The Office will consult with the applicable local building jurisdiction prior to acceptance or nonacceptance of the plan review request and subsequently notify the clinic, in writing, of its decision.

(b) If the Office agrees to provide plan review and certification services for the governing authority or owner, the applicant shall submit the following items to the Office:

1. A completed application, design plans and specifications for the clinic project, pursuant to Section 7-113, and;
2. A fee, pursuant to Section 7-2106.

(c) The Office shall review the plans to all applicable provisions in the latest edition of the *California Building Standards Code*.

(d) Upon completion of plan review and receipt of all applicable fees, the Office shall provide the applicant with written certification that the project design plans and specifications meet the applicable clinic provisions in the latest edition of the *California Building Standards Code*.

(e) Building construction inspection for the project clinic shall be performed by the local building jurisdiction. Therefore, the governing authority or owner shall submit to the city or county applicable project documents required for these building inspection services.

7-2103. Hospital outpatient services clinic project submittal to local building jurisdiction.

(a) The hospital governing authority or owner of a freestanding outpatient services clinic, as described in Section 7-2100 (a) (3) or (4), shall submit construction plans to the city or county, as applicable, for plan review and building inspection, pursuant to this section or may request the Office to perform plan review and building inspection, pursuant to Section 7-2104. Certification by the local building jurisdiction that the project clinic is in conformance with the applicable clinic provisions in the latest edition of the *California Building Standards Code* is also required for clinics described in 7-2100 (a) (3).

(b) If the hospital governing authority or owner of a clinic, as described in Section 7-2100 (a) (3), initially submits clinic plans to the city or county for plan review, the city or county shall respond to the clinic owner, in writing, stating its decision of whether or not the plan review will include certification.

(c) If the city or county indicates to the hospital governing authority or owner that it will include certification with plan review of the specified clinic project, the city or county shall:

HISTORY NOTE APPENDIX FOR CHAPTER 7

Administrative Regulations for the Office of Statewide Health Planning and Development (Title 24, Part 1, California Code of Regulations)

The format of the history notes has been changed to be consistent with the other parts of the *California Building Standards Code*. The history notes for prior changes remain within the text of this code.

1. (OSHPD 1/97) Regular order by the Office of Statewide Health and Planning and Development to amend Chapters 6 and 7 as a result of SB 1953. Filed at the secretary of state on March 25, 1998; effective March 25, 1998. Approved by the California Building Standards Commission on March 18, 1998.
2. (OSHPD-EF 1/98) Emergency order by the Office of Statewide Health Planning and Development to adopt administrative regulations specific to Hospital Inspector Citizenship/Alien Certification. Filed at the secretary of state on March 25, 1998; effective March 25, 1998. Approved by the California Building Standards Commission on March 18, 1998.
3. BSC 1997 Triennial Code Adoption Cycle (OSHPD 1/97, OSHPD 2/97, OSHPD 3/97). Approved by the California Building Standards Commission on May 6, 1998. Filed at the secretary of state's office on September 29, 1998, effective October 29, 1998.
4. Erratum to correct printing errors. Correction to Section 7-101 to change the date of the Alfred E. Alquist Act to 1983. Correction of grammatical error in Section 7-111. Publication date February 15, 2001.
5. (OSHPD 9/99) Testing, Inspection, and Observation Program. Various sections in Chapter 7. Approved as submitted by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on June 8, 2000, effective July 7, 2000.
6. (OSHPD 10/99) Filing Fee/Personal Knowledge Verified Reports. Amend Sections 7-103, 7-111, 7-113, 7-133, 7-151. Approved as submitted by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on June 8, 2000, effective July 7, 2000.
7. (OSHPD 3/99) Class C Hospital Inspector. Amend Sections 7-200, 7-204, 7-206. Approved as submitted by the California Building Standards Commission on May 24, 2000. Filed with the Secretary of State on June 8, 2000, effective July 7, 2000.
8. (OSHPD 01/01) 7-115 Preparation of Plans and Specifications. 7-152 Supplantation of an Architect, Engineer or Inspector of Record, Special Inspector or Contractor. Approved as submitted by the California Building Standards Commission on September 25, 2001. Files with the Secretary of State on November 6, 2001, effective December 6, 2001.
9. October 1, 2002 Errata adding Number 8 above.
10. (OSHPD EF 01/02) Amend Chapter 6 and 7 of Part 1. Approved as emergency by the California Building Standards Commission on January 15, 2003, and filed with the Secretary of State on January 16, 2003. Effective January 16, 2003.
11. (OSHPD 4/02) Chapter 7, amend various sections. Safety Standards for Health Facilities. Article 3, Section 7-125, Final Review of Plans and Specification. Article 3, Section 7-129, Time Limitations for Approval. Article 4, Section 7-135, Time of Beginning Construction. Article 4, Section 7-141, Administration of Construction. Article 4, Section 7-155, Final Approval of the Work. Article 19, Section 7-203, Applying for the Certification Examination. Article 21, Section 7-2100 through 7-2106, Scope of Responsibilities. Approved by the Building Standards Commission on May 14, 2003 and effective June 13, 2003.
12. (OSHPD EF 01/02) Amend Chapters 6 and 7 of Part 1. Approved as permanent emergency by the California Building Standards Commission. Permanent approval on May 14, 2003. Certification of Compliance filed with the Secretary of State on May 15, 2003. Effective January 16, 2003.
13. (OSHPD 01/04) Amend Chapter 6, Article 1 for change in Seismic Performance Category nonconforming building. Amend Chapter 7, Article 3 for plan review, Article 4 for construction inspection, Article 5 for appeals to the Hospital Building Safety Board, Article 6 for contract services, Article 19 for certification of hospital inspectors, and Article 21 for fees for review of specified clinics. Filed with Secretary of State on May 23, 2006, and effective on the 30th day of filing with the Secretary of State.
14. (OSHPD 01/06) Amendments to administrative standards for the review and construction of health facilities: preparation of plans and specifications, Hospital Inspector certification, and plan review and inspection of outpatient clinics. Filed with the Secretary of State on February 15, 2007, and effective 30 days thereafter.
15. (OSHPD EF 01/07) Amend Title 24, Part 1, Chapter 7, Article 1, Article 2, Article 3, Article 20. Approved by the California Building Standards Commission on July 19, 2007. Filed with Secretary of State on July 20, 2007, effective on July 20, 2007.

