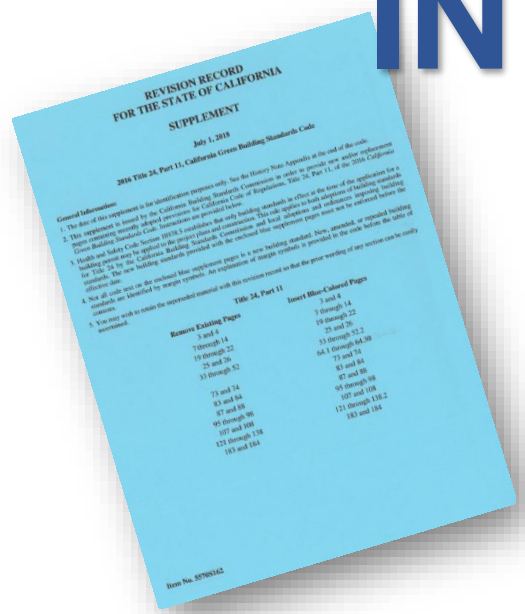
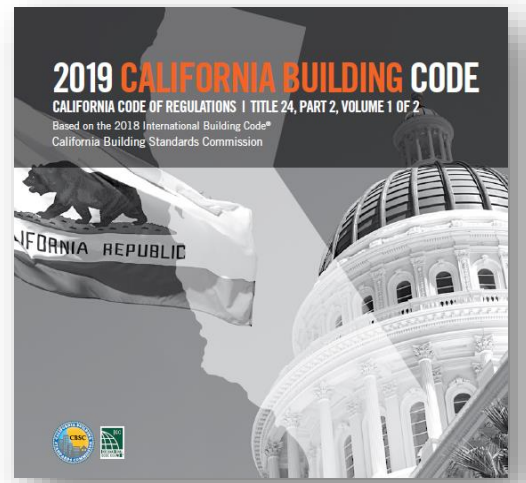


# 2019 CALIFORNIA BUILDING CODE INTERVENING UPDATES

*(effective 7/2021)*

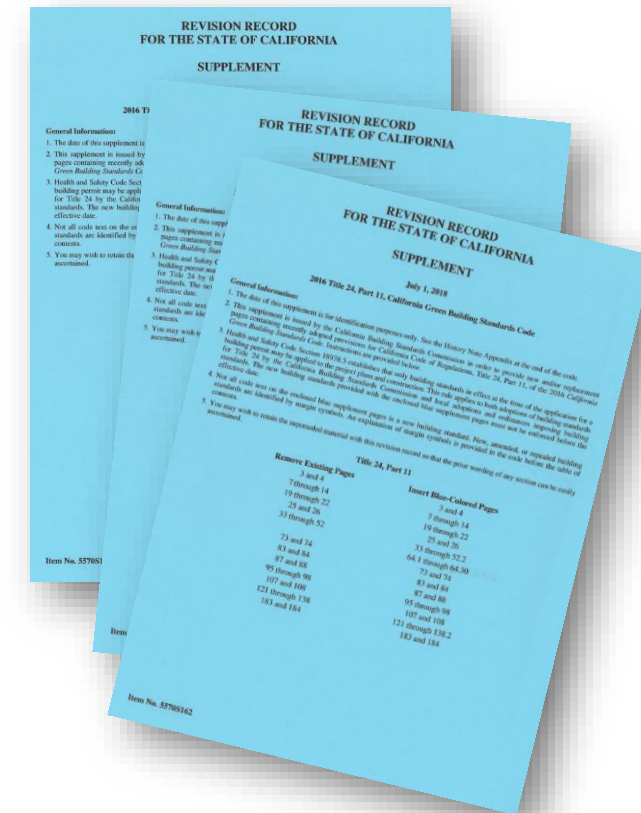


January 12, 2021



# 2019 Intervening Code Changes

- ❑ Part 1 – Administrative Code –
  - ❑ Changes in Scope
- ❑ Part 2 – Vol 1 (Non-structural) Building Code
  - ❑ Housekeeping Items
- ❑ Part 2 – Vol 2 (Structural) Building Code
- ❑ Part 3 – Electrical Code - Housekeeping Items
- ❑ Part 4 – Plumbing Code - Housekeeping Items
- ❑ Part 5 – Mechanical Code - More Alignment with ASHRAE 170
- ❑ Part 10 – Exist. Bldg. Code – Clarify OSHPD 1R



# LEGEND

**Bold black text or** regular black text = Existing text – no change

Underlined blue text = new text

Underlined red text = new text with emphasis

~~Struck out gray text~~ = text to be deleted

*Purple text* = references

# **PART 1**

# **CALIFORNIA ADMINISTRATIVE CODE**

# Part 1 – Delay in Compliance

## 1.5.2 Delay in compliance.

...

### 2. Requirements for SPC. ...

#### 2. Additional extension beyond January 1, 2020. ...

2.1.4. Extension where Construction has Started. For a hospital building ~~that has previously submitted to the Office a retrofit, replace or rebuild project~~ for which a retrofit, replace or rebuild project was previously submitted to the Office and is under construction, the application for an extension ~~request~~ shall contain all the following:

...

# Part 1 – Definitions

## ARTICLE 2 DEFINITIONS

*EMERGENCY REPAIR [OSHPD 1, 2, 3 & 5] Repair to, or replacement of, an element of a building, structure, utility system, or equipment that is essential to the continued safe occupation and operation of a facility. May include repairs needed after a disaster.*

...

### HEALTH FACILITY

...

(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~~ freestanding from a building in which hospital services are provided. If any one or more outpatient clinical services in the building provide services to inpatients, the building shall not be included as a “hospital building” if those services provided to inpatients represent no more than 25 percent of the total outpatient visits provided at the building. Hospitals shall maintain on an ongoing basis, data on the patients receiving services in these buildings, including the number of patients seen, categorized by their inpatient or outpatient status. Hospitals shall submit this data annually to the Department of Public Health.

# Part 1 – Definitions

## ARTICLE 2 DEFINITIONS

**MAINTENANCE [OSHPD 1, 2, 3 & 5]** *The routinely recurring work required to keep a facility (plant, building, structure, utility system, etc.) in such condition that it may be continuously utilized, at its original or designed capacity and efficiency, for its intended purpose. Actions necessary for retaining or restoring an existing element or component of a building, piece of equipment, machine, or system to the specified operable condition to achieve its maximum useful life, including corrective maintenance and preventative maintenance.*

**SUBSTANTIAL COMPLIANCE** *means a stage of a construction or building project, or a designated portion of the project, that is sufficiently complete in accordance with the approved construction plans and the California Building Standards Code such that the owner may use or occupy the building project, or designated portion thereof, for the intended purpose.*

# Part 1 – Application

## ARTICLE 3 APPROVAL OF CONSTRUCTION DOCUMENTS

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

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. *Plans may be submitted electronically in a format acceptable to the Office.*

B. Preliminary Review: Two copies of reports or preliminary plans and outline Specifications. Plans/ drawings size shall not exceed 36 × 48 inches, and bundled sets of plans/drawings shall not exceed 40 lbs in weight. *Plans may be submitted electronically in a format acceptable to the Office.*

C. Final Review: Two copies of final construction documents and reports. Plans/drawings size shall not exceed 36 × 48 inches, and bundled sets of plans/ drawings shall not exceed 40 lbs. in weight. *Plans may be submitted electronically in a format acceptable to the Office.*



# Part 1 – Application of Energy Code

## ARTICLE 3

### APPROVAL OF CONSTRUCTION DOCUMENTS

#### 7-118. Building Energy Efficiency Program.

~~*Healthcare facility projects*~~ ~~*Projects*~~ that consist of *a newly constructed building or an addition that increases floor area and conditioned volume requires compliance with Title 24, Part 6 California Energy Code.* ~~*any new elements related to A through D below shall include a Building Energy Efficiency Program with the submittal. The Program shall describe how the design of the building systems meets the owner's project requirements and include the associated Basis of Design (BOD) document required under Title 24, Part 6. The BOD shall describe the building systems to be commissioned, outline design assumptions, describe how the building systems design meets the owner's project requirements, and why the systems were selected. The BOD shall cover the following systems and components as described in the Building Energy Efficiency Standards, Nonresidential Compliance Manual:*~~

~~*A. HVAC systems efficiencies.*~~

~~*B. Indoor lighting systems efficiencies.*~~

~~*C. Water heating systems efficiencies.*~~

~~*D. Building envelope considerations.*~~

# Part 1 – CHANGE IN SCOPE

## ARTICLE 3

### APPROVAL OF CONSTRUCTION DOCUMENTS

#### 7-125 Final Review of Construction Documents

*(e) Changes in scope. Changes to the scope of the original project shall be required to be submitted as a separate project.*

*Exception: At the discretion of the Office, changes in scope may be allowed in the original project. The Office may require the documents to be reviewed as an examination subject to fees required by Section 7-133 (q)(3).*

# Part 1 – Fees

## ARTICLE 3

### APPROVAL OF CONSTRUCTION DOCUMENTS

#### 7-133. Fees.

...

(d) **Preliminary review.** The fee for review of preliminary plans and outline specifications pursuant to Section 7-121 is 10 percent of the fee indicated in Section 7-133(a) and shall be due upon the submission of preliminary plans and outline specifications. The preliminary review fee is nonrefundable and shall be deducted from the application fee specified in Section 7-133(a).

...

(h) **Phased submittal review and collaborative review.** 1. The fee for phased submittal, review and approval pursuant to Section 7-130 shall be in accordance with Section 7-133(a) 1 through 7. A nonrefundable fee of 10 percent of the fee indicated in Section 7-133(a) shall be due upon approval of the written agreement and shall be deducted from the application fee specified in Section 7-133(a) or fees pursuant to Section 7-133(e) for incremental phased reviews. ~~based on the written agreement, which shall include a schedule for payment. The phased review fee shall not exceed the fee required by Section 7-133(a).~~

2. The fee for collaborative review shall be 1.95 percent of the estimated construction cost as calculated in accordance with Section 7-133(a) 4 through 7. A nonrefundable fee of 10 percent of the fee indicated in Section 7-133(a) shall be due upon approval of the written agreement and shall be deducted from the application fee specified in Section 7-133(a) or for incremental collaborate reviews Section 7-133(e).

# Part 1 – Fee Refund

## ARTICLE 3

### APPROVAL OF CONSTRUCTION DOCUMENTS

#### 7-134. Fee refund.

(a) Upon written request from the applicant, a fee refund may be issued pursuant to this section.

1. The written refund request must be submitted to the Office within:

- a. One year ~~of the date that a project is closed~~ from the date that a Certificate of Occupancy or a Certificate of Substantial Compliance is issued by the office,
- b. One year ~~of~~ from the date the project is withdrawn by the applicant, or
- c. One year ~~of~~ from the date when an application may become void, based on the requirements of Section 7-129, Time Limitations for Approval.

# Part 1 – CHANGE IN SCOPE

## ARTICLE 4 CONSTRUCTION

### 7-153 Changes to the approved work.

...

(d) **Changes in scope.** ~~At the discretion of the Office, a~~ A amended construction documents that change the scope of the original project ~~may~~ shall be required to be submitted as a separate project.

Exception: At the discretion of the Office, changes in scope may be submitted as amended construction documents. The ~~documents shall be reviewed by~~ Office may require the documents to be reviewed as an examination ~~and~~ subject to fees required by Section 7-133 (q)(3).

# Part 1 – IOR Qualification

## ARTICLE 19 CERTIFICATION AND APPROVAL OF HOSPITAL INSPECTORS

### 7-204. Minimum qualification for examination.

...

#### (b) Minimum qualifications for Class “B” Hospital Inspector Exam: ...

4. High school graduation or the equivalent, two years experience involving building projects of Type I or II construction as an architect’s, engineer’s, owner’s, local building official’s or general contractor’s representative in technical inspection of major structural and non-structural systems and components of buildings, and possession of valid certification in all of the following four categories:

# **PART 2**

# **CALIFORNIA BUILDING CODE**

# Part 2 – Volume 1 - Application

## CHAPTER 1 SCOPE AND ADMINISTRATION DIVISION I CALIFORNIA ADMINISTRATION

### SECTION 1.10 OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT

**1.10.1 OSHPD 1 and OSHPD 1R.** *Specific scope of application of the agency responsible for enforcement, enforcement agency and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.*

***Application***—*[OSHPD 1] General acute care hospital buildings. [OSHPD 1R] Nonconforming hospital [SPC or freestanding](#) buildings that have been removed from acute-care service.*



# Part 2 – Volume 1 - Definitions

## CHAPTER 1

### SCOPE AND ADMINISTRATION

#### SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL

...

**[A] 104.11 Alternative materials, design and methods of construction and equipment. ...**

...

**104.11.4 Earthquake monitoring instruments. [OSHPD 1 & 4]** *The enforcement agency may require earthquake monitoring instruments for any building that receives approval of an alternative system for the Lateral Force Resisting System (LFRS). There shall be a sufficient number of instruments to characterize the response of the building during an earthquake and shall include at least one tri-axial free field instrument or equivalent. A proposal for instrumentation and equipment specifications shall be forwarded to the enforcement agency for review and approval.*

*The instruments shall be interconnected for common start and common timing. Each instrument shall be located so that access is maintained at all times and is unobstructed by room contents. A sign stating “MAINTAIN CLEAR ACCESS TO THIS INSTRUMENT” shall be posted in a conspicuous location.*

*The Owner of the building shall be responsible for the implementation of the instrumentation program. Maintenance ~~of the instrumentation and removal/processing of the records shall be the responsibility of the enforcement agency or its designated agent.~~ and service of the instruments shall be in accordance with Appendix L, Section 1.101.3 of Part 2, Volume 2 of the California Building Code.*

# Part 2 – Volume 1 - Equipment

## SECTION 202 DEFINITIONS

**EQUIPMENT.** *[DSA-SS, DSA-SS/CC, ~~OSHDP 1, 1R, 2, 4 & 5~~] Equipment as used in this part and all applicable parts of the California Building Standards Code shall be classified as fixed equipment, mobile or movable equipment.*

- (1) **FIXED EQUIPMENT** includes items that are permanently affixed to the building or permanently connected to a service distribution system that is designed and installed for the specific use of the equipment.*
- (2) **MOVABLE EQUIPMENT** means equipment, with or without wheels or rollers, that typically remains in one fixed location during its service life or use, but is required to be periodically moved to facilitate cleaning or maintenance.*
- (3) **MOBILE EQUIPMENT** means equipment, with or without wheels or rollers, that is typically used in a different location than where it is stored and moved ...*

# Part 2 – Volume 1 - Equipment

## SECTION 202 DEFINITIONS

**EQUIPMENT. [OSHPD 1, 2, 4 & 5]** Equipment as used in this part and all applicable parts of the California Building Standards Code shall be classified as fixed equipment, mobile, movable, countertop, interim, temporary or other equipment.

**(1) COUNTERTOP EQUIPMENT** means equipment that typically remains on countertop, work bench, shelf or support other than the floor during its service life.

**(2) ESSENTIAL EQUIPMENT** means equipment that failure of which will significantly impair operations during or after a disaster. The facility shall determine which equipment is essential. Essential equipment shall also include equipment that is required to provide the eight basic services of the hospital as defined in Section 1224.3.

**(3) FIXED EQUIPMENT** means equipment that is directly attached to the building or directly connected to a service distribution system/utility and that typically remains in one fixed location during its service life or use.

**(4) INTERIM EQUIPMENT** means temporary equipment that will be in use greater than 180 days but only for the duration of the construction project that it is related to.

**(5) MOBILE EQUIPMENT** means equipment, with or without wheels or rollers, that is typically used in a different location than where it is stored and moved from one location in the building to another during ordinary use.

# Part 2 – Volume 1 - Equipment

## SECTION 202 DEFINITIONS

**EQUIPMENT. [OSHPD 1, 2, 4 & 5]** Equipment as used in this part and all applicable parts of the California Building Standards Code shall be classified as fixed equipment, mobile, movable, countertop, interim, temporary or other equipment. (continued)

**(6) MOVABLE EQUIPMENT** means equipment that is directly attached to the building and/or directly connected to a service distribution system/utility, with or without wheels or rollers, that typically remains in one fixed location during its service life or use, but is required to be periodically moved to facilitate cleaning or maintenance.

**(7) OTHER EQUIPMENT** means equipment that is not directly connected to a building service distribution system, with or without wheels or rollers, and is typically used at a single location during its service life.

**(8) TEMPORARY EQUIPMENT** means fixed, movable, countertop, or other equipment that is used during replacement, maintenance, or repair for a time of service as defined in Section 108.

# Part 2 – Volume 1 – Handwashing Fixture

## SECTION 202 DEFINITIONS

**HANDWASHING FIXTURE. [OSHPD 1, 2, 3, 4, and 5]** *A **lavatory**, provided in patient rooms, nurse stations and other patient care areas **intended for staff hygiene and infection control**. These **special-use lavatories** are an element of a handwashing station as defined in Section 1224.3. Refer to the California Plumbing Code Section 210.0 definition for additional requirements associated with handwashing fixtures.*

**RESTRICTED AREA. [OSHPD 1, ~~1R~~, 2, 3, 4 & 5]** *(See Chapter 12, Section 1224.3 for defined term.)*

# Part 2 – Volume 1 - HOUSEKEEPING

## SECTION 1207 INTERIOR SPACE DIMENSIONS

**1207.2 Minimum ceiling heights.** ... (existing text remains unchanged)

**Exception 5** *[OSHPD 1, ~~1R~~, 2, 3 & 5] Minimum ceiling heights shall comply with Section 1224.4.10.*

## SECTION 1207 INTERIOR SPACE DIMENSIONS

**1209.2 Finish materials.** Walls, floors and partitions in toilet and bathrooms shall comply with Sections 1210.2.1 through 1210.2.4.

*[OSHPD 1, ~~1R~~, 2, 3 & 5] Facilities subject to OSHPD 1, ~~1R~~, 2, 3 & 5 shall also comply with Section 1224.4.11.*

# Part 2 – Volume 1 – Change in Function

## CHAPTER 12 INTERIOR ENVIRONMENT

### *SECTION 1224 [OSHPD 1 & ~~OSHPD 1R~~] HOSPITALS*

#### ***1224.3 Definitions...***

***CHANGE IN FUNCTION.*** *A change in function is a change in activity, service or licensed service provided, within the project limits, that does not necessarily change the use, specific use, and/or occupancy. Conversion of a space that results in a change in activity such that the space will be required to satisfy the functional ~~space~~ requirements under a different code sub-section than that of the prior use is considered a change in function.*

# Part 2 – Volume 1 – Handwashing Station

## CHAPTER 12 INTERIOR ENVIRONMENT

### SECTION 1224 [OSHPD 1 & OSHPD 1R] HOSPITALS

#### **1224.3 Definitions...**

**HANDWASHING STATION.** A **clinical staff-use** area that provides a handwashing fixture, cleaning agents and means for drying hands. Handwashing stations shall be **immediately accessible to the patient care area they serve without requiring passage through a doorway, unless hands-free operation is provided.** Refer to the California Plumbing Code, Section 210.0 for the definition of handwashing fixture.



# Part 2 – Volume 1 – Patient Care Stations

**PATIENT CARE LOCATIONS.** Multi-patient treatment rooms, where allowed, may provide patient care stations in bays or cubicles as follows:

**BAY (patient).** A space for human occupancy with one hard wall at the headwall and up to one hard wall at either side, with two to three soft walls (i.e. cubicle curtains or portable privacy screen). The **required area** for the specific patient care space **shall be provided within the cubicle curtain** and not overlap with access circulation aisle.

**CUBICLE.** A space intended for human occupancy that has at least one opening and no door and is enclosed on three sides with full-height or partial-height partitions.

**PATIENT CARE STATION.** A designated space for a specific patient care function. This term does not imply any structural requirement (e.g. a Post-Anesthesia Care Unit (PACU) can have 10 patient care stations of which three are rooms, three are cubicles and four are bays).

**PATIENT ROOM.** Licensed patient bed rooms. Also referred to as a patient bedroom.

# Part 2 – Volume 1 – Outpatient Corridors

## **1224.4.7 Corridors.**

**1224.4.7.1 Width.** *The minimum width of corridors and hallways shall be 8 feet (2438 mm).*

...

**1224.4.7.3 Outpatient services.** *Outpatient clinics or outpatient departments which contain facilities for outpatient use only, such as laboratory, x-ray, physical therapy or occupational therapy, shall have a minimum corridor or hallway width of 5 feet (1524 mm). Corridors serving gurney or stretcher traffic shall comply with minimum width requirements of Section 1020.2. Outpatient clinics and outpatient department consisting only of waiting rooms, business offices, doctor's offices, and examining rooms, where there is no traffic through such area to other services or to exits from the building, shall have a minimum corridor or hallway width of 44 inches (1118 mm).*

# Part 2 – Volume 1 – Ceiling Heights and Grab Bars

## **1224.4.10 Ceiling heights.**

**224.4.10.1 Minimum height.** *The minimum height of ceilings shall be 8 feet (2438 mm).*

**Exception:** *Closet, toilet room and bathroom ceiling heights, and soffits over fixed cabinets and work surfaces, shall not be less than 7 feet (2134 mm).*

...

**1224.4.18 Grab bars.** *Each toilet, bathtub and shower serving patients in rooms not required to provide mobility features, shall have conveniently placed grab bars that shall comply with Chapter 11B, Sections 11B-609.2, 11B-609.3, 11B-609.5, 11B-609.6 and 11B-609.8.*



**11B-609.2 Cross Section.** Grab bars shall have a cross section complying with Section 11B-609.1 or 11B-609.2.2.

**11B-609.3 Spacing.** The space between the wall and the grab bar shall be 1-1/2 inches...

**11B-609.5 Surface hazards.** Grab bars and any wall... adjacent to grab bars shall be free of sharp or abrasive elements...

**11B-609.6 Fittings.** Grab bars shall not rotate within their fittings.

**11B-609.8 Structural strength.** Allowable stresses shall not be exceeded... force of 250 lbs. is applied at any point...

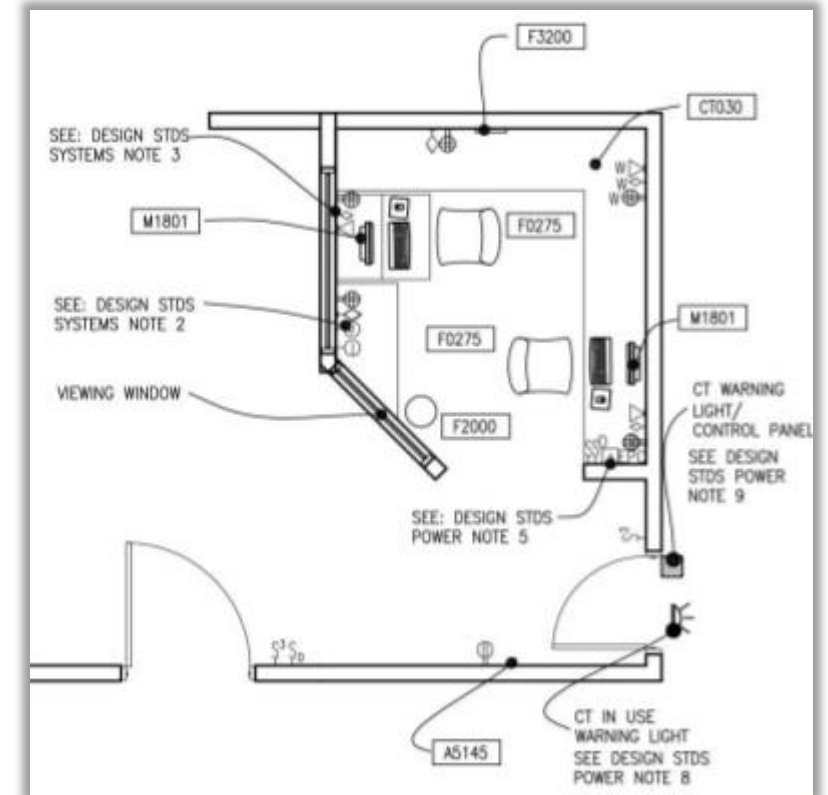
# Part 2 – Volume 1 – CT Control Room or Alcove

**1224.18.3 Computerized tomography (CT) scanning.** If provided, the CT space shall accommodate the following:

**1224.18.3.1 Space required.** If provided, CT scan spaces shall accommodate the equipment with a minimum of 3 feet (914 mm) on all sides of the equipment, together with the following:

1. A control room or alcove shall be provided that is designed to accommodate the computer and other controls for the equipment. A view window shall be provided to permit view of the patient.
2. A patient toilet room ~~convenient~~ readily accessible to the procedure room.

**READILY ACCESSIBLE.** Located within the same department or service space as the identified area or room, or located in and shared with an adjacent directly accessible unit.





## **1224.23 STORAGE.**

**1224.23.1 General storage.** *Hospitals shall provide general storage space of at least 20 square feet (1.86 m<sup>2</sup>) per bed in addition to specialized storage spaces. All storage spaces shall be located within a conforming ~~the~~ hospital building and readily accessible to the connecting corridor required under Section 1224.4.7.5. Required storage, including but not limited to patient, dietary, etc., shall accommodate at least 72 hours of storage capacity in a conforming building. Storage beyond this requirement may be in a non-hospital or non-conforming building.*



# Part 2 – Volume 1 - NICU

## 1224.29 INTENSIVE CARE UNITS

**1224.29.2 Newborn intensive care units (NICU).** *The NICU shall comply with all the requirements of Section 1224.29.1 except as supplemented, amended or modified below. Additionally, each NICU shall include or comply with the following:*

...

**1224.29.2.6 Area.** *Each patient care space shall contain a minimum of 120 square feet (11.15 m<sup>2</sup>) of clear floor area per bassinet excluding handwashing fixtures and aisles. There shall be an aisle for circulation adjacent to each patient care space with a minimum width of 4 feet (1219 mm). Where multi-patient rooms are used, a separate treatment area of 120 square feet (15.15 m<sup>2</sup>) shall be provided in compliance with 1224.4.4.1.2.*

...

**1224.29.2.10 Infant formula facilities.** *Nourishment area required under Section 1224.20.1.14.4 not required. Newborn intensive care units shall include infant formula facilities complying with the following requirements:*

...



# Part 2 – Volume 1 – ED Trauma Room



## **1224.33 EMERGENCY SERVICE**

### **1224.33.3 Basic Emergency Medical Service....**

**1224.33.3.7 Trauma/cardiac rooms.** *These rooms are for emergency procedures, including emergency surgery... At least one scrub sink shall be located outside the entrance to each trauma room. One scrub station consisting of two scrub positions is permitted to serve two trauma rooms if located adjacent to the entrance of each procedure room. The placement of scrub sinks shall not restrict the minimum required corridor width. If a handwashing station is provided within the trauma room, it does not satisfy the requirement for a scrub sink. The handwashing station shall have a minimum of 5 feet (1524 mm) clearance from the procedure table and not located between any curtained procedure area and the entrance to a multi-bay trauma room.*

## Part 2 – Volume 1 – Medication Prep Room

**1224.33.3.13 Administrative center or nurses' station for staff work and charting.** *These areas shall have space for counters, cabinets, ~~and medication storage~~, and shall be provided with handwashing stations. They may be combined with or include centers for reception and communication.*

**1224.33.3.14 Medication preparation room.** *A medication preparation room shall be provided in accordance with Section 1224.4.4.4.1.*

**Emergency Departments are required to have at least one Medication Preparation Room in addition to Medication Dispensing Units.**



# Part 2 – Volume 1 – Nuclear Medicine

## 1224.34 NUCLEAR MEDICINE

### 1224.34.1 General

**1224.34.1.1 Radiation protection.** A certified physicist shall specify the type, location and amount of radiation protection to be installed in accordance with final approved department layout and equipment selection. The physicist report shall address dosing and circulation of dosed patients, including within multi-bay scanner rooms. Radiation protection requirements shall be incorporated into the construction documents...

**1224.34.1.2 Nuclear medicine room.** Shall be sized to accomplish the equipment and a gurney.

**1224.34.1.2.3 Single-Photon Emission Computed Tomography (SPECT) Facilities.** When provided shall include the following:

1. Scanner room. Scanner room shall provide a minimum clearance of 4 feet (1218 mm) at each side and the foot of the scanner. In multi-bay scanner rooms, a minimum clearance of 4 feet (1218 mm) shall be provided between each scanner and any mobile screen used between bays.
2. Control room. A control room shall be provided with a full ~~direct~~ view of the patient in the SPECT scanner.

**1224.34.2 Support areas for nuclear medicine services.** The nuclear medicine area when operated separately from imaging department shall provide the following support areas. If nuclear medicine is provided within the imaging department, compatible areas may be shared with other imaging modalities:

# Part 2 – Volume 1 – Rehab Therapy

**1224.35 REHABILITATION THERAPY DEPARTMENT.** Where two or more rehabilitation services are provided, **facilities and equipment between services may be shared.** Rehabilitation therapy services may be provided as part of dedicated inpatient nursing unit in a rehabilitation center **or as outpatient services, or both.**

**1224.35.1 Rehabilitation center space.** *If provided, a rehabilitation center space shall be designed to meet the requirements of Section 1224.14, except as follows:*

1. *Patient bedrooms shall contain a minimum of 110 square feet...*

...

6. **If outpatient rehabilitation services are provided,** *an examination and treatment room, adjacent or directly accessible to an office for the physician in charge of the outpatient service.*

7. **If outpatient rehabilitation services are provided,** *a patient **waiting area** with access to telephone, drinking fountain, and men's and women's toilet room facilities in or adjacent to the rehabilitation outpatient service area. **Outpatients shall not traverse an inpatient nursing unit.***

8. *Access to an outside area...*

# Part 2 – Volume 1 – Renal Dialysis

## **1224.36 RENAL DIALYSIS SERVICE (ACUTE AND CHRONIC)**

...

**1224.36.2.7 Medication stationdispensing.** ~~If provided, t~~There shall be a medication ~~dispensing~~ station for the dialysis center. ~~A work counter and handwashing fixtures shall be included in this area. Provisions shall be made for the controlled storage, preparation, distribution and refrigeration of medications.~~ The medication station shall comply with the provisions of Section 1224.4.4.4.

**1224.4.4.4 Medication station.** Provision shall be made for distribution of medications. This shall be done from a medication preparation room or from a self-contained dispensing unit.

**1224.4.4.4.1 Medication preparation room.** If provided, this room shall...

**1224.4.4.4.2 Self-contained medication dispensing unit.** If provided, a self-contained medication dispensing unit shall...

## **1224.39 OUTPATIENT SERVICE SPACE**

... (existing text remains unchanged)

### **1224.39.3 Gastrointestinal endoscopy**

#### **1224.39.3.2 Processing room.**

1224.39.3.2.2 The decontamination area shall be equipped with the following:

1. Utility sink(s) shall be provided as appropriate to the method of decontamination used.
2. One freestanding handwashing station.
3. Work counter space(s).
4. [Eyewash station.](#)



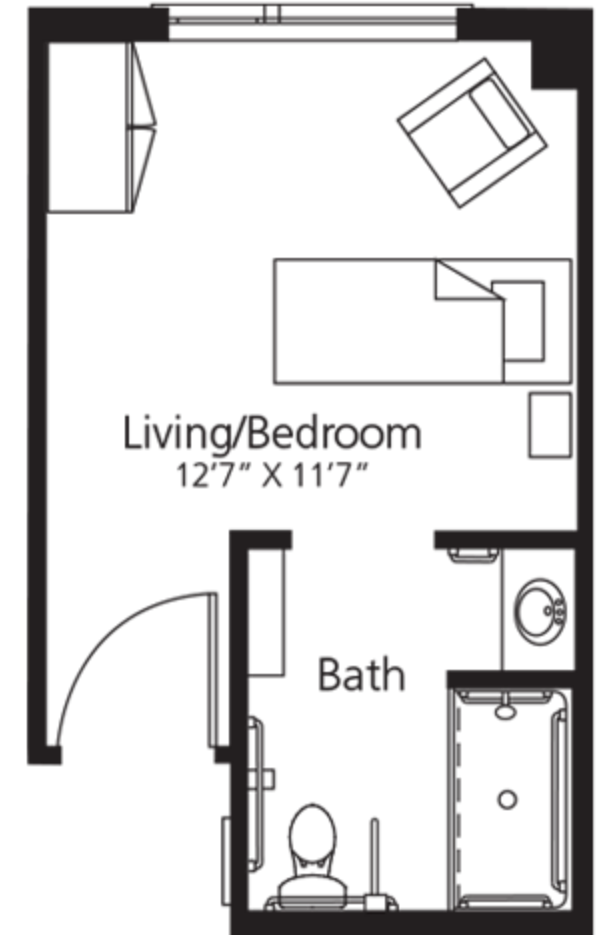
# Part 2 – Volume 1 – SNF Patient Toilet Room

## SECTION 1225 [OSHPD 2] SKILLED NURSING AND INTERMEDIATE-CARE FACILITIES

### 1225.5.1 MEDICAL MODEL

#### 1225.5.1.2 NURSING SERVICE SPACE

**1225.5.1.2.6 Patient toilet room.** Each patient room shall have its own patient toilet room. Each patient shall have direct access to a toilet without entering a general corridor or patient bed area in a shared patient room.



# Part 2 – Volume 1 – Outpatient Clinical Services of a Hospital

## SECTION 1226 [OSHPD 3] CLINICS

**1226.5 OUTPATIENT CLINICAL SERVICES OF A HOSPITAL.** *A licensed hospital may elect to locate certain outpatient services in a freestanding ~~outpatient clinical services~~ building(s). To be considered a freestanding ~~outpatient clinical services~~ building, refer to the California Administrative Code Section 7-111. ~~the building must~~ See Section 309A.5.1 of the California Existing Building Code for eligibility for jurisdiction of the local enforcement agency over freestanding buildings adjacent to hospital buildings. ~~not be physically attached to a building in which inpatient services are provided. No more than 25 percent of the services provided in an outpatient clinical services building may be rendered to inpatients. Services that duplicate the basic services may be provided in freestanding building(s). These services, defined in Subsection (a) of the Health and Safety Code Section 1250, must be in excess of the basic services, necessary for hospital licensure, required to be located in a hospital building under OSHPD jurisdiction.~~*



# Part 2 – Volume 1 - Outpatient Clinical Services of a Hospital

## **1226.5 (continued)**

Outpatient clinical services of a hospital provided in a **freestanding building** are regulated under [OSHPD 3] instead of [OSHPD 1]. ~~Outpatient clinical services of a hospital in a freestanding outpatient clinical services building~~ These services shall comply with Sections 1226.4.2 through 1226.4.8 and the provisions of this section. Outpatient clinical services of a hospital that are not addressed in the provisions of Section 1226 shall comply with applicable provisions of Section 1224 and/or Section 1228 as if those provisions were repeated in Section 1226.5.

## **GASTROINTESTINAL ENDOSCOPY**

...

~~1226.5.11.6.9 Cleanup room. Refer to Section 1224.39.2.3.1.~~

# Part 2 – Volume 1 – Psychiatric Hospitals

## **SECTION 1228 [OSHPD 5] ACUTE PSYCHIATRIC HOSPITALS**



### **1228.14 PSYCHIATRIC NURSING SERVICE SPACE...**

**1228.14.3 Airborne Infection Isolation (All) room(s).** *There shall be at least one airborne infection isolation (All) room provided for each 50 beds, and for each major fraction thereof. Airborne infection isolation rooms for pediatric/adolescent and forensic supplemental service nursing units shall be calculated independently from, and shall not be shared with each other or any other psychiatric nursing unit. Refer to Section 1224.14.3 and the general construction requirements of Section 1228.4. [A bedpan flushing attachment is not required.](#)*



# Part 2 – Volume 1 - HOUSEKEEPING

## SECTION 1228 [OSHPD 5] ACUTE PSYCHIATRIC HOSPITALS

### 1228.14 PSYCHIATRIC NURSING SERVICE SPACE...

**1228.30 PEDIATRIC AND ADOLESCENT PSYCHIATRIC ~~UNIT~~ SERVICE SPACE.** Pediatric and adolescent psychiatric service space ~~unit~~ patient areas shall be separate and distinct from adult psychiatric service space ~~unit~~ patient areas. The requirements of Section 1228.14, Psychiatric Nursing Service Space shall apply to pediatric and adolescent units as amended below:

**1228.30.1 Patient bedroom...**

**1228.30.2 Patient toilet room...**

**1228.30.3 Activity areas.** The pediatric and adolescent activities space may be **centralized** for common use by multiple pediatric and adolescent psychiatric units or may be located **in each individual unit**, in response to the **Patient Safety Risk Assessment**. Centralized activity areas shall be readily accessible without traversing adult patient areas.

# Part 2 – Volume 2 - CODE CHANGES

- **Part 2 Volume 2**
  - Chapter 16/16A Structural Design
  - Chapter 17A Special Inspections and Tests
  - Chapter 18A Soils and Foundations
  - Chapter 21: Masonry
  - Chapter 22/22A
  - Appendix L: Earthquake Recording Instrumentation

# Part 2 – Volume 2 – Earthquake Loads

## CHAPTER 16 STRUCTURAL DESIGN

### SECTION 1613 EARTHQUAKE LOADS

...

**1613.4 Component Importance Factors.** *[OSHPD 1R, 2 & 5] Nonstructural components designated below shall have a component importance factor,  $I_p$ , equal to 1.5:*

- 1. For components that are required for life-safety purposes after an earthquake, including emergency and standby power systems, mechanical smoke removal systems, fire protection sprinkler systems and fire alarm control panels.*
- 2. For medical equipment, ~~mechanical and electrical components and components required for~~ patient life support. ~~for patients~~*

# Part 2 – Volume 2 - Housekeeping

## **CHAPTER 16A STRUCTURAL DESIGN**

### **SECTION 1617A MODIFICATIONS TO ASCE 7**

...

**1617A.1.18 ASCE 7, Section 13.1.4.** *Replace ASCE 7, Section 13.1.4, with the following:*  
**[\[DSA-SS, for OSHPD see Section 13.1.4.a\]](#)**

**13.1.4 Exemptions.** *The following nonstructural components are exempt from the requirements of this section:*

# Part 2 – Volume 2 - Equipment

13.1.4.a [OSHPD 1, 1R, 2, 4 & 5]. The following nonstructural components and equipment shall be anchored in accordance with this section. Design and detailing shall be in accordance with Chapter 13 except as modified by this section.

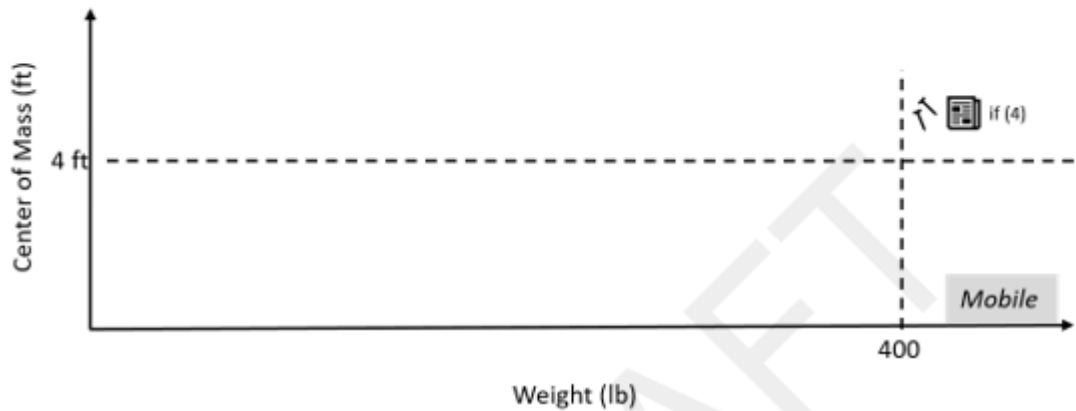
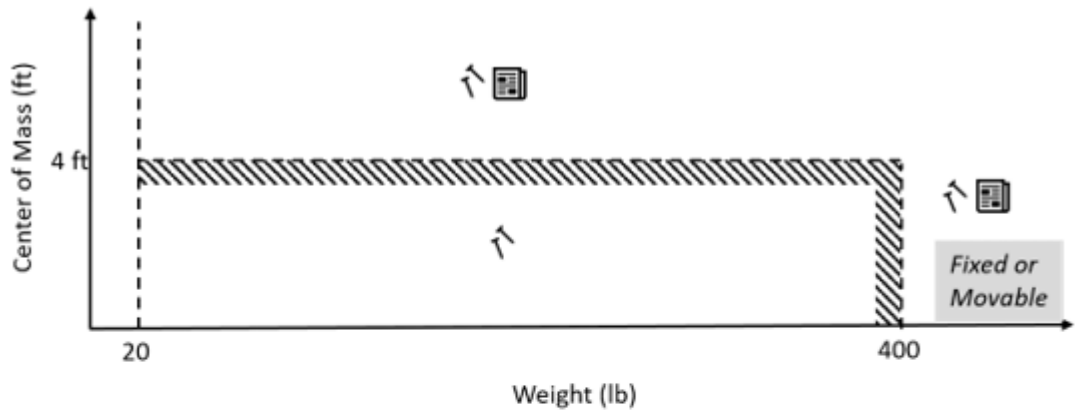
1. Fixed Equipment:
2. Movable Equipment:
3. Mobile Equipment:
4. Countertop Equipment:
5. Temporary Equipment:
6. Interim Equipment:
7. Other Equipment:
8. Equipment with hazardous contents:

...

**Exemptions:**

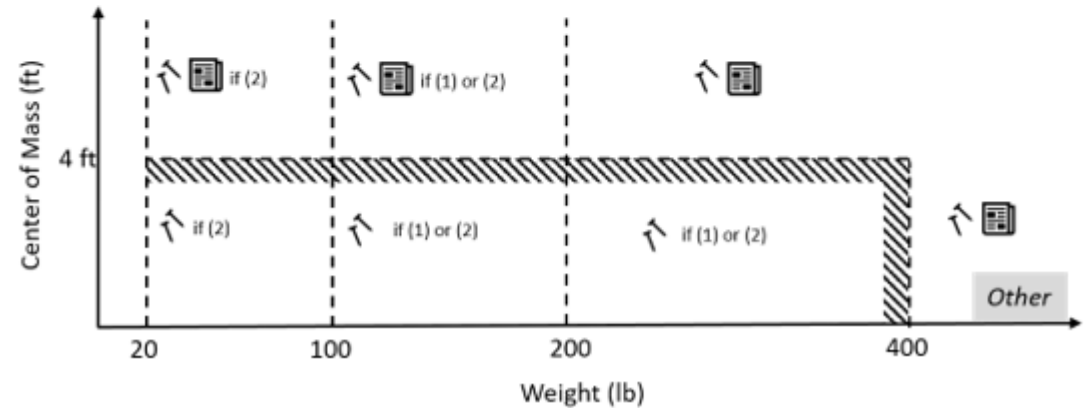
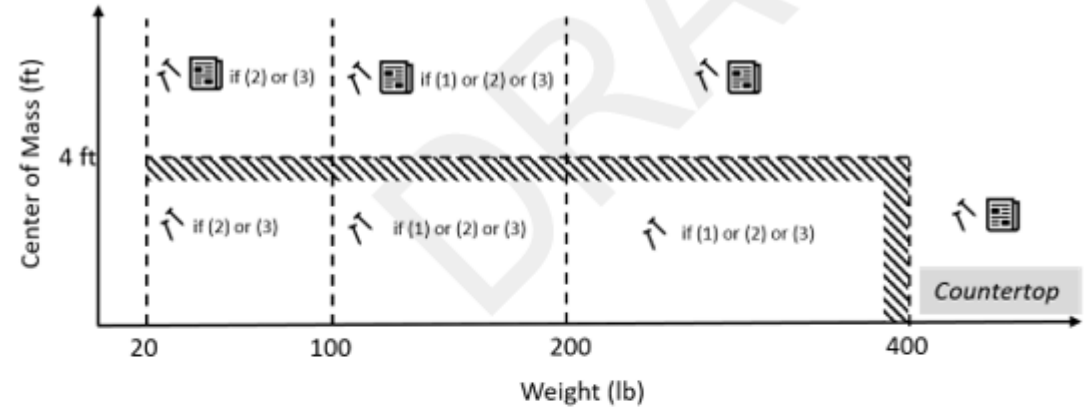
See Pin 68  
for more details

# Modifications to ASCE 7-16 Section 13.1.4



Support and attachment detail drawings are required

Seismic design calculations are required



# Part 2 – Volume 2 – Piping and Tubing

**1617A.1.26 ASCE 7, Section 13.6.7.3.** Replace ASCE 7, Section 13.6.7.3 with the following:

## **13.6.7.3 Additional Provisions for Piping and Tubing Systems.**

- A) Design for the seismic forces of Section 13.3 shall not be required for piping systems where flexible connections, expansion loops, or other assemblies are provided to accommodate the relative displacement between component and piping, where the piping system is positively attached to the structure, and where any of the following conditions apply:
1. Trapeze assemblies are supported by 3/8-inch (10 mm) or 1/2-inch (13 mm) diameter rod hangers not exceeding 12 inches (305 mm) in length from the pipe support point to the connection at the supporting structure, ~~do not support piping with  $I_p$  greater than 1.0~~, and no single pipe exceeds the diameter limits set forth in item 2b below or 2 inches (50 mm) for Seismic Design Category D, E, or F where  $I_p$  is greater than 1.0 and the total weight supported by any single trapeze is 100 pounds (445 N) or less; or ...

# Part 2 – Volume 2 - Special Inspections and Tests

## CHAPTER 17A

### SPECIAL INSPECTIONS AND TESTS

...

#### SECTION 1705A REQUIRED SPECIAL INSPECTIONS AND TESTS

...

**1705A.12.5 Architectural components.** Periodic special inspection is required for the erection and fastening of exterior cladding, interior and exterior nonbearing walls, ceilings, and interior and exterior veneer in structures assigned to Seismic Design Category D, E or F.

*[OSHPD 1] Exception: Periodic special inspection is not required where continuous inspection of the work is performed in accordance with Section 7-145 of the CAC.*

...



## Special Seismic Certification

- **Fluoroscopy, X-ray, and CT Equipment**
  - Required for diagnostic services of emergency/trauma patients. At least one depending on the services provided.
- **Servers, Routers and Switches**
  - Affect the continuous operation of the facility

# Part 2 – Volume 2 – Special Inspections and Tests

## CHAPTER 17A

### SPECIAL INSPECTIONS AND TESTS

...

#### SECTION 1705A REQUIRED SPECIAL INSPECTIONS AND TESTS

...

**1705A.13.3.1 [OSHPD 1 & 4]** *Special seismic certification shall be required for the following systems, equipment, and components:*

...

~~7. Fluoroscopy and x-ray equipment required for radiological/diagnostic imaging service (for service requirements see CBC Section 1224.18.1), and any fluoroscopy and/or radiographic system provided in support of diagnostic assessment of trauma injuries.~~

7. Imaging equipment needed for diagnostic services of emergency/trauma patients, a minimum of one such equipment.

~~8. CT (Computerized Tomography) systems used for diagnostic assessment of trauma injuries.~~

~~Exception: CT equipment used for treatment or in hybrid operating rooms, including those used for interventional CT, unless used for diagnostic assessment of trauma injuries....~~

# Part 2 – Volume 2 – Special Inspections and Tests

## CHAPTER 17A SPECIAL INSPECTIONS AND TESTS

...

### SECTION 1705A REQUIRED SPECIAL INSPECTIONS AND TESTS

...

**1705A.13.3.1 [OSHPD 1 & 4]** *Special seismic certification shall be required for the following systems, equipment, and components:*

...

210. Internal communication servers, ~~and~~ routers, and switches failure of which could impair the continued operation of the facility.

221. Medical gas and vacuum systems.

**Exceptions:**

...

12. Temporary and Interim equipment.



# Part 2 – Volume 2 – Soils and Foundations

## CHAPTER 18A

### SOILS AND FOUNDATIONS

...

### SECTION 1809A SHALLOW FOUNDATIONS

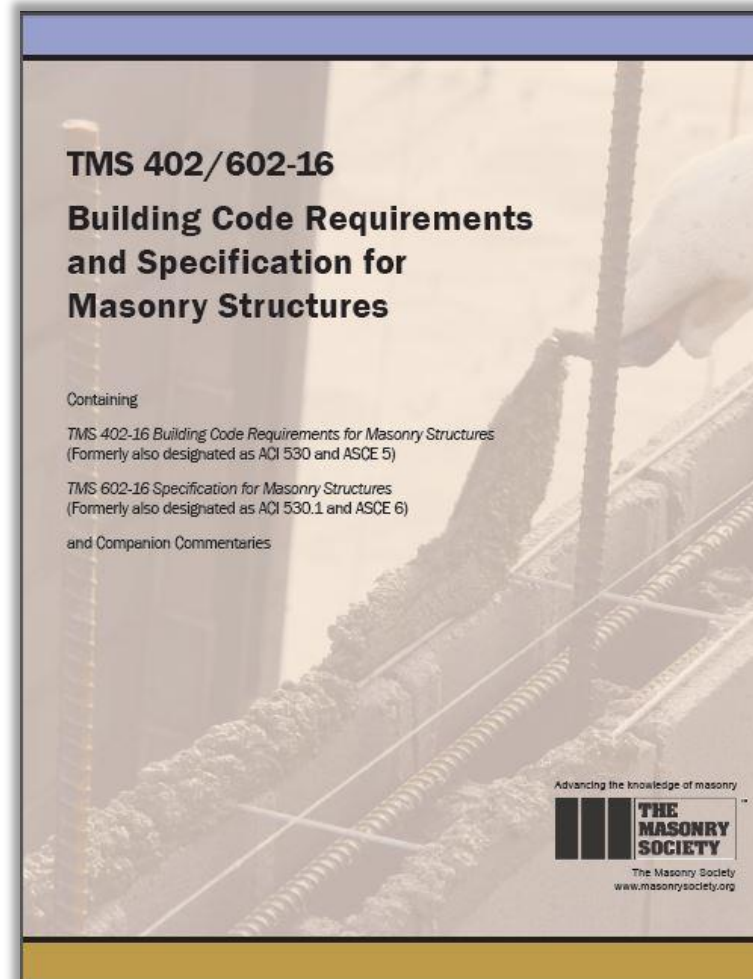
...

**1809A.10 Pier and curtain wall foundations.** ~~Reserved.~~ Not permitted by DSA –SS, DSA –SS/CC, or OSHDP.

...

# Chapter 21: Masonry

- Aligned masonry amendments in Chapter 21 with Model Code based on public comment.



# Part 2 – Volume 2 - Masonry

## CHAPTER 21 MASONRY

...

### SECTION 2103 MASONRY CONSTRUCTION MATERIALS

...

**2103.5 Air entrainment. [OSHPD 1R, 2 & 5]** Air-entraining ~~substances~~ materials or air-entraining admixtures shall not be used in grout unless tests are conducted to determine compliance with the requirements of this code.

...

# Part 2 – Volume 2 - Masonry

## CHAPTER 21 MASONRY

...

### SECTION 2104 CONSTRUCTION

...

#### **2104.2.1 General conditions.**

...

~~Grout pours greater than 12 inches (300 mm) in height shall be consolidated by mechanical vibration during placement to fill the grout space before loss of plasticity, and reconsolidated by mechanical vibration to minimize voids due to water loss. Grout pours less than 12 inches in height may be puddled.~~ Grout pours shall be consolidated in accordance with the requirements of TMS 602, Article 3.5E.

*Between grout pours or where grouting has been stopped more than an hour, a horizontal construction joint shall be formed by stopping all wythes at the same elevation and with the grout stopping a minimum of 1 1/2 inches (38 mm) below a mortar joint, except at the top of the wall. Where bond beams occur, the grout pour shall be stopped a minimum of 1/2 inch (12.7 mm) below the top of the masonry.*

~~The construction documents shall completely describe grouting procedures, subject to approval of OSHPD.~~

...

# Part 2 – Volume 2 - Masonry

## CHAPTER 21 MASONRY

...

### SECTION 2105 QUALITY ASSURANCE

...

**2105.2 Compressive Strength,  $f'_m$ .** [OSHPD 1R, 2 & 5] The minimum specified compressive strength,  $f'_m$ , ~~assumed in the~~ design shall be 2000 psi (13.79MPa) for all masonry construction using materials and details of construction required herein. Testing of the constructed masonry shall be provided in accordance with Section 2105.5 or Section 2105.6.

**Exception:** ~~Subject to the approval of the enforcement agency, h~~Higher values of  $f'_m$  may be used in the design of reinforced grouted masonry and reinforced hollow-unit masonry. ~~The approval shall be based on prism test results submitted by the architect or engineer to the enforcement agency which demonstrate the ability of the proposed construction to meet prescribed performance criteria for strength and stiffness. The design shall take into account the mortar joint depth. In no case shall the  $f'_m$  assumed~~ used in design exceed 3,000 psi (20.7MPa).

...



# Part 2 – Volume 2 - Masonry

## CHAPTER 21 MASONRY

...

### SECTION 2105 QUALITY ASSURANCE

...

**2105.3 Mortar and grout tests. [OSHPD 1R, 2 & 5]** *These tests are to establish whether the masonry components meet the specified component strengths.*

*At the beginning of all masonry work, at least one test sample of the mortar shall be taken on three successive working days and at least at one-week intervals thereafter. Samples of grout shall be taken for each mix design, each day grout is placed, and not less than every 5,000 square feet of masonry wall area. They shall meet the minimum strength requirement given in ASTM C270 Table 1 ~~and TMS 402 Section 7.4.4.2.2~~ for mortar and ASTM C476/TMS 602 Section 2.2 for grout. Additional samples shall be taken whenever any change in materials or job conditions occur, as determined by the building official. When the prism test method in accordance with Section 2105.5 is used during construction, the tests in this section are not required.*

...

# Part 2 – Volume 2 - Masonry

## CHAPTER 21 MASONRY

...

### SECTION 2106 SEISMIC DESIGN

...

#### **2106.1 Seismic design requirements for masonry.**

...

##### ***2106.1.1 Modifications to TMS 402. [OSHPD 1R, 2 & 5] Modify TMS 402 Section 7.4.4 as follows:***

...

***2. Minimum reinforcement for masonry columns.*** *The spacing of column ties shall be as follows: not greater than 8 bar diameters, ~~24 tie diameters~~, or one half the least dimension of the column for the full column height, or 8 inches. Ties shall be at least 3/8" in diameter and shall be embedded in grout. Top tie shall be within 2 inches (51 mm) of the top of the column or of the bottom of the horizontal bar in the supported beam.*

...

# Part 2 – Volume 2 - Masonry

## CHAPTER 21 MASONRY

...

### SECTION 2107 ALLOWABLE STRESS DESIGN

...

**2107.4 [OSHPD 1R, 2 & 5] TMS 402, Section 8.3.7, maximum bar size. [OSHPD 1R, 2 & 5] Add the following to Chapter 8:**

**8.3.7 – Maximum bar size.** The maximum bar diameter shall conform to the requirements of TMS 402, Section 9.3.3.1 ~~not exceed one-eighth of the nominal wall thickness and shall not exceed one-quarter of the least dimension of the cell, course or collar joint in which it is placed, nor be larger than No. 9 in size.~~

...

**2107.6 [OSHPD 1R, 2 & 5] Modify TMS 402, Section 8.3.4.4 by the following:**

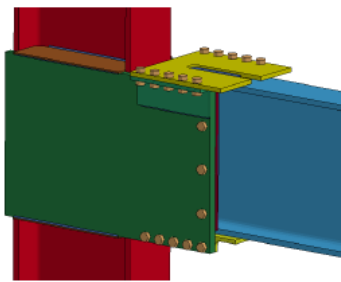
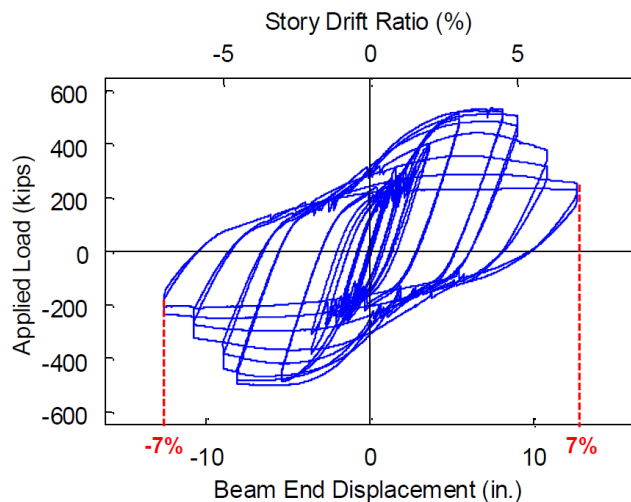
~~All~~ Reinforced masonry walls, columns, pilasters, beams and lintels ~~components~~ that are subjected to in-plane forces shall have a maximum flexural tensile reinforcement ratio,  $\rho_{max}$ , not greater than that computed by equation 8-20.

...

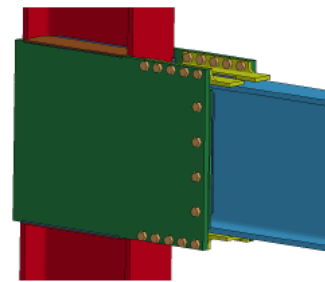
# Chapter 22/22A: Steel

- Adopted AISC 358-16 with Supplement 1 which includes the SidePlate field-bolted connection.
- Added amendments for use in OSHPD buildings.

Applied Load vs. Beam End Displacement



Config. A (Standard)



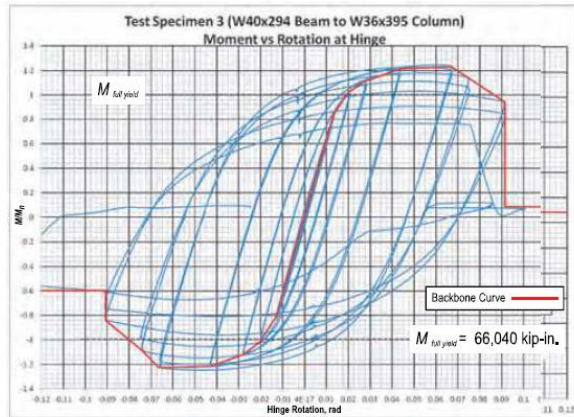
Config. B (Narrow)

Figure 1 - SidePlate® Various Connection Configurations

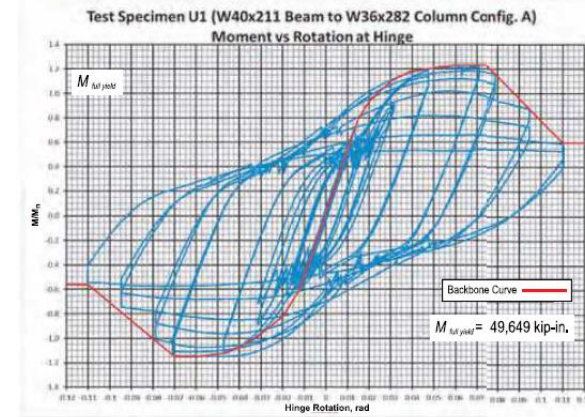
Beam Flange and Web Local Buckling  
(at Test Completion)



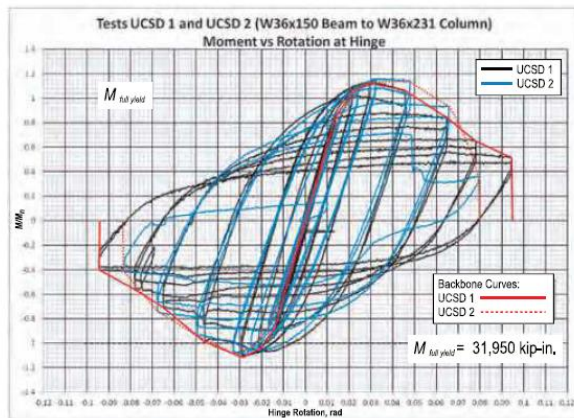
# Welded vs Bolted – Cyclic Testing



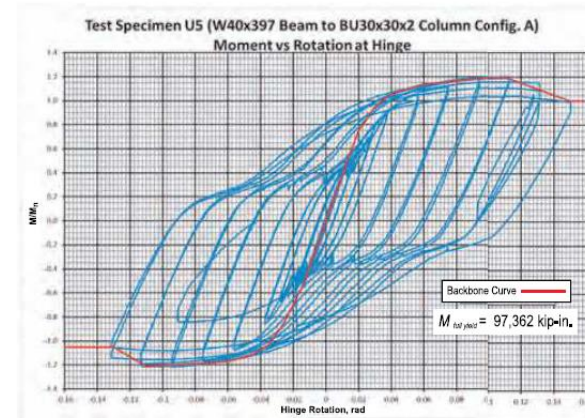
(a)



(c)



(b)



(d)

Fig. C-11.2(a–b). SidePlate moment frame tests—backbone curves for (a) W40x294 (W1000x438) beam (field-welded); (b) W36x150 (W920x223) beam (field-welded) (measured at the beam hinge location).

Fig. C-11.2(c–d). SidePlate moment frame tests—backbone curves for (c) W40x211 (W1000x314) beam (field-bolted); (d) W40x397 (W1000x591) beam (field-bolted) (measured at the beam hinge location).



# OSHDP Design Criteria

## OSHDP SidePlate Design Criteria

The following Design Criteria, which are applicable to Cedars Sinai Marina Del Rey Hospital shall govern this project:

- a.) A linear analysis procedure shall be used for design of the SMF using the SidePlate connection.
- b.) Intersecting columns at Grids B/4, B/11, E/4, and E/11 from 2<sup>nd</sup>-5<sup>th</sup> Floors shall be checked with seismic axial load to include 30% of the seismic shear (due to  $M_{pr}/L$ ) from the fixed-pinned moment frame occurring in the orthogonal direction from Floors 2<sup>nd</sup> – 5<sup>th</sup>.
- c.) The design of the bolted SidePlate connection shall comply with AISC 358s1-18 Chapter 11 for SMF, except as specified below:
- d.) The design of the Bolted SidePlate Connection shall comply with 2016 CBC for new buildings, including Section 2205A.5.2, except as permitted or required in items e. through m. below
- e.) Both Configurations A (typical field-bolted standard connection) and Configurations B (typical field-bolted narrow connection) are acceptable.
- f.) The span to depth  $L_h/d$  shall be 4.5 or greater.
- g.) The minimum bolt spacing shall not be less than 3 bolt diameters.
- h.) For two-sided SidePlate connections sharing the same side plates at the same height and depth across the column, the vertical offset in the beams shall not exceed 10". Calculations specific to the vertical offset connection shall be provided for review. Where the offset exceeds 10" or for other SidePlate configurations, the sloped horizontal shear plates shall be 1 vertical to 6 horizontal or flatter slope and calculations with finite element analysis of the connection shall be submitted to OSHDP for review and approval through an Alternate Method of Compliance.
- i.) Skewed beams shall utilize the link-beam fabrication method with CJP welded splices for skew angles. The skew angle shall be less than 15 degrees.
- j.) The gap-to-side plate thickness ratio shall range from 2.1 to 2.3.
- k.) The bolted SidePlate connection (configuration A) shall use the U-shaped cover plate (B) with the k dimension extension. The k dimension length is defined as beam depth  $d_b/6$ , rounded to the nearest 1/2 inch.
- l.) A complete frame analysis for gravity and design wind loading using LRFD load combinations in the 2016 CBC Section 1605A.2 shall be performed including DCRs. Frame beam member nominal moment strengths ( $M_n$ ) used for gravity and design wind loading for the Bolted SidePlate connection using Class A or Class B faying surfaces shall be taken as  $0.80F_yZ$  for frame beams up to 300 plf and  $0.60F_yZ$  for frame beams greater than 300 plf.

# Part 2 – Volume 2 - Instrumentation



## APPENDIX L EARTHQUAKE RECORDING INSTRUMENTATION

...

### SECTION L101 GENERAL

...



**1.101.3 Maintenance.** Maintenance and service of the instrumentation shall be provided by the owner of the structure. Data produced by the instrument shall be made available to the building official on request.

Maintenance and service of the instruments shall be performed annually by an approved testing agency. The owner shall file with the building official a written report from an approved testing agency certifying that each instrument has been serviced and is in proper working condition. This report shall be submitted when the instruments are installed and annually thereafter. Each instrument shall have affixed to it an externally visible tag specifying the date of the last maintenance or service and the printed name and address of the testing agency.

*[OSHPD 1] ~~The owner of the building shall be responsible for the implementation of the instrumentation program. Maintenance of the instrumentation and removal/processing~~ Data retrieval from the instrument and processing of the records shall be the responsibility of the enforcement agency.*

...





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