

# REVISION RECORD FOR THE STATE OF CALIFORNIA

## ERRATA

January 1, 2009

### 2007 Title 24, Part 8, California Historical Building Code

**PLEASE NOTE: The date of this Errata 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suggested that the section number as well as the page number be checked when inserting this material and removing the superseded material.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specifications, and construction for that permit, it is strongly recommended that the removed pages be retained for historical reference.**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

vii and viii  
17 and 18  
29 and 30

#### Insert New Pages

vii and viii  
17 and 18  
29 and 30



# CALIFORNIA CODE OF REGULATIONS, TITLE 24

## California Agency Information Contact List

**California Energy Commission**

Energy Hotline . . . . . (800) 772-3300  
 Building Efficiency Standards  
 Appliance Efficiency Standards  
 Compliance Manual/Forms

**California State Lands Commission**

Marine Oil Terminals. . . . . (562) 499-6317

**California State Library**

Construction Standards. . . . . (916) 445-9604

**Corrections Standards Authority**

Local Adult Jail Standards . . . . . (916) 324-1914  
 Local Juvenile Facility Standards . . . . . (916) 324-1914

**Department of Consumer Affairs—Acupuncture Board**

Office Standards . . . . . (916) 445-3021

**Department of Consumer Affairs—Board of Pharmacy**

Pharmacy Standards . . . . . (916) 574-7900

**Department of Consumer Affairs—Bureau of Barbering and Cosmetology**

Barber and Beauty Shop and  
 College Standards . . . . . (916) 952-5210

**Department of Consumer Affairs—Bureau of Home Furnishings and Thermal Insulation**

Insulation Testing Standards . . . . . (916) 574-2041

**Department of Consumer Affairs—Structural Pest Control Board**

Structural Standards . . . . . (800) 737-8188

**Department of Consumer Affairs—Veterinary Medical Board**

Veterinary Hospital Standards . . . . . (916) 263-2610

**Department of Food and Agriculture**

Meat & Poultry Packing Plant Standards . . . (916) 654-0509  
 Dairy Standards . . . . . (916) 654-0773

**Department of Health Services**

Organized Camps Standards . . . . . (916) 449-5661  
 Public Swimming Pools Standards . . . . . (916) 449-5661  
 Asbestos Standards. . . . . (510) 620-2874

**Department of Housing and Community Development**

Residential—Hotels, Motels, Apartments  
 Single-Family Dwellings . . . . . (916) 445-9471  
 Permanent Structures in Mobilehome  
 and Special Occupancy Parks . . . . . (916) 445-0481  
 Factory-Built Housing, Manufactured  
 Housing and Commercial Modular . . . . . (916) 445-3338  
 Mobile Homes—Permits & Inspections  
 Northern Region. . . . . (916) 255-2501  
 Southern Region. . . . . (951) 782-4420  
 Employee Housing Standards . . . . . (916) 445-9471

**Department of Water Resources**

Gray Water Installations Standards. . . . . (916) 651-9667

**Division of the State Architect—Access Compliance**

Access Compliance Standards . . . . . (916) 445-8100

**Division of the State Architect—Structural Safety**

Public Schools Standards. . . . . (916) 445-8100  
 Essential Services Building Standards . . . . . (916) 445-8100

**Division of the State Architect—State Historical Building Safety Board**

Alternative Building Standards. . . . . (916) 445-8100

**Office of Statewide Health Planning and Development**

Hospital Standards . . . . . (916) 440-8409  
 Skilled Nursing Facility Standards . . . . . (916) 440-8409  
 Clinic Standards . . . . . (916) 440-8409

**Office of the State Fire Marshal**

Code Development and Analysis. . . . . (916) 445-8200  
 Fire Safety Standards. . . . . (916) 445-8200  
 Fireplace Standards . . . . . (916) 445-8200  
 Day Care Centers Standards . . . . . (916) 445-8200  
 Exit Standards . . . . . (916) 445-8200

# HOW TO DETERMINE WHERE CHANGES HAVE BEEN MADE

Symbols in the margins indicate where changes have been made or language has been deleted.

|| This symbol indicates that a change has been made.

> This symbol indicates deletion of language.

**SECTION 8-810  
HOLLOW CLAY TILE**

The historical performance of hollow clay tile in past earthquakes shall be carefully considered in evaluating walls of hollow clay tile construction. Hollow clay tile bearing walls shall be evaluated and strengthened as appropriate for lateral loads and their ability to maintain support of gravity loads. Suitable protective measures shall be provided to prevent blockage of exit stairways, stairway enclosures, exit ways and public ways as a result of an earthquake.

**SECTION 8-811  
VENEERS**

**8-811.1 Terra cotta and stone.** Terra cotta, cast stone and natural stone veneers shall be investigated for the presence of suitable anchorage. Steel anchors shall be investigated for deterioration or corrosion. New or supplemental anchorage shall be provided as appropriate.

**8-811.2 Anchorage.** Brick veneer with mechanical anchorage at spacings greater than required by the regular code may remain, provided the anchorages have not corroded. Nail strength in withdrawal in wood sheathing may be utilized to its capacity in accordance with code values.

**SECTION 8-812  
GLASS AND GLAZING**

**8-812.1 Glazing subject to human impact.** Historical glazing material located in areas subject to human impact may be approved subject to the concurrence of the enforcing agency when alternative protective measures are provided. These measures may include, but not be limited to, additional glazing panels, protective film, protective guards or systems, and devices or signs which would provide adequate public safety.

**8-812.2 Glazing in fire-rated systems.** See Section 8-402.3.

**TABLE 8-8A  
ALLOWABLE VALUES FOR EXISTING MATERIALS**

EXISTING MATERIALS OR CONFIGURATIONS OF MATERIALS <sup>1</sup>	ALLOWABLE VALUES x14.594 for N/m
1. Horizontal diaphragms <sup>2</sup> 1.1 Roofs with straight sheathing and roofing applied directly to the sheathing 1.2 Roofs with diagonal sheathing and roofing applied directly to the sheathing 1.3 Floors with straight tongue-and-groove sheathing 1.4 Floors with straight sheathing and finished wood flooring with board edges offset or perpendicular 1.5 Floors with diagonal sheathing and finished	100 lbs per foot for seismic shear  250 lbs per foot for seismic shear  100 lbs per foot for seismic shear 500 lbs per foot for seismic shear  600 lbs per foot for seismic shear
2. Crosswalls <sup>2,3</sup> 2.1 Plaster on wood or metal lath 2.2 Plaster on gypsum lath 2.3 Gypsum wallboard, unblocked edges 2.4 Gypsum wallboard, blocked edges	Per side: 200 lbs per foot for seismic shear 175 lbs per foot for seismic shear 75 lbs per foot for seismic shear 125 lbs per foot for seismic shear
Existing footings, wood framing, structural steel and reinforced steel 3.1 Plain concrete footings 3.2 Douglas fir wood 3.3 Reinforcing steel 3.4 Structural steel	$f'_c = 1,500$ psi (10.34 MPa) unless otherwise shown by tests <sup>4</sup> Allowable stress same as D.F. No. 1 <sup>4</sup> $f_i = 18,000$ lbs per square inch (124.1 N/mm <sup>2</sup> ) maximum $f_t = 200,00$ lbs per square inch (137.9 N/mm <sup>2</sup> ) maximum

<sup>1</sup>Material must be sound and in good condition.

<sup>2</sup>A one-third increase in allowable stress is not allowed.

<sup>3</sup>Shear values of these materials may be combined, except the total combined value shall not exceed 300 pounds per foot (4380 N/m).

<sup>4</sup>Stresses given may be increased for combinations of loads as specified in the regular code.

**TABLE 8-8B  
ALLOWABLE VALUES OF NEW MATERIALS USED IN CONNECTION WITH EXISTING CONSTRUCTION**

NEW MATERIALS OR CONFIGURATIONS OF MATERIALS	ALLOWABLE VALUES <sup>1</sup>
1. Horizontal diaphragms <sup>2</sup> <ol style="list-style-type: none"> <li>1.1 Plywood sheathing nailed directly over existing straight sheathing with ends of plywood sheets bearing on joists or rafters and edges of plywood located on center of individual sheathing boards</li> <li>1.2 Plywood sheathing nailed directly over existing diagonal sheathing with ends of plywood sheets bearing on joists or rafters</li> <li>1.3 Plywood sheathing nailed directly over existing straight or diagonal sheathing with ends of plywood sheets bearing on joists or rafters with edges of plywood located over new blocking and nailed to provide a minimum nail penetration into framing and blocking of 1<sup>5</sup>/<sub>8</sub> inch (41 mm)</li> </ol>	225 lbs per foot (3283 N/m)  375 lbs per foot (5473 N/m)  75 percent of the values specified in the regular code
2. Shear walls: (general procedure) Plywood sheathing applied directly over wood studs. No value shall be given to plywood applied over existing plaster or wood sheathing	100 percent of the value specified in the regular code for shear walls
3. Crosswalls: (special procedure only) <ol style="list-style-type: none"> <li>3.1 Plywood sheathing applied directly over wood studs. No value shall be given to plywood applied over existing plaster or wood sheathing</li> <li>3.2 Drywall or plaster applied directly over wood studs</li> <li>3.3 Drywall or plaster applied to sheathing over existing wood studs</li> </ol>	133 percent of the value specified in the regular code for shear walls  100 percent of the values in the regular code The values specified in the regular code reduced as noted. <sup>3</sup> (UBC Table 25-I, Footnote 1)
4. Tension bolts <ol style="list-style-type: none"> <li>4.1 Bolts extending entirely through unreinforced masonry walls secured with bearing plates on far side of a three-wythe-minimum wall with at least 30 square inches (19 350 mm<sup>2</sup>) of area<sup>4,5</sup></li> <li>4.2 Bolts extending to the exterior face of the wall with a 2½-inch (63.5 mm) round plate under the head and drilled at an angle of 22½ degrees to the horizontal, installed as specified for shear bolts<sup>4,5,7</sup></li> </ol>	1,800 lbs (8006 N) per bolt <sup>6</sup> 900 lbs (4003 N) per bolt for two-wythe walls <sup>6</sup>  1,200 lbs (5338 N) per bolt
5. Shear bolts Bolts embedded a minimum of 8 inches (203 mm) into unreinforced masonry walls and centered in a 2½-inch-diameter (63.5 mm) hole filled with dry-pack or nonshrink grout. Through bolts with first 8 inches (203 mm) as noted above and embedded bolts as noted in Item 4.2 <sup>5,7</sup>	½ inch (12.7 mm) diameter = 350 lbs (1557 N) <sup>6</sup> ⅝ inch (15.9 mm) diameter = 500 lbs (2224 N) <sup>6</sup> ¾ inch (19 mm) diameter = 750 lbs (3336 N) <sup>6</sup>
6. Infilled walls Reinforced masonry infilled openings in existing unreinforced masonry walls. Provide keys or dowels to match reinforcing.	Same as values specified for unreinforced masonry walls
7. Reinforced masonry Masonry piers and walls reinforced per the regular code	Same as values specified in the regular code <sup>8</sup>
8. Reinforced concrete Concrete footings, walls and piers reinforced as specified in the regular code and designed for tributary loads	Same values as specified in the regular code <sup>8</sup>

<sup>1</sup>A one-third increase in allowable stress is not allowed, except as noted.

<sup>2</sup>Values and limitations are for nailed plywood. Higher values may be used for other fastening systems such as wood screws or staples when approved by the enforcing authority.

<sup>3</sup>In addition to existing sheathing value.

<sup>4</sup>Bolts to be ½-inch (12.7 mm) minimum diameter.

<sup>5</sup>Drilling for bolts and dowels shall be done with an electric rotary drill. Impact tools shall not be used for drilling holes or tightening anchors and shear bolt nuts.

<sup>6</sup>Other bolt sizes, values and installation methods may be used, provided a testing program is conducted in accordance with regular code standards. Bolt spacing shall not exceed 6 feet (1830 mm) on center and shall not be less than 12 inches (305 mm) on center.

<sup>7</sup>Embedded bolts to be tested as specified in regular code standards.

<sup>8</sup>Stresses given may be increased for combinations of loads as specified in the regular code

**HISTORY NOTE APPENDIX**  
***CALIFORNIA HISTORICAL BUILDING CODE***  
**(Title 24, Part 8, California Code of Regulations)**

For prior history, see History Note Appendix to the *California Historical Building Code*, 2001 Triennial Edition, effective November 1, 2002.

1. The 2007 Triennial Edition, *California Historical Building Code*, was approved by the California Building Standards Commission on January 29, 2007. The California Building Standards Commission established January 1, 2008, as the effective date.

2. Editorial correction to Chapter 8-8, Section 8-812, Tables 8-8A and 8-8B. Include missing tables in 2007 annual code adoption supplement.

