

CALIFORNIA EXISTING BUILDING CODE – MATRIX ADOPTION TABLE CHAPTER 8 – ALTERATIONS—LEVEL 2

***(Matrix Adoption Tables are nonregulatory, intended only as an aid
See Chapter 1 for state agency authority and building applic***

Adopting Agency	BSC	BSC- CG	SFM	HCD			DSA			OSHPD						
				1	2	1/AC	AC	SS	SS/CC	1	1R	2	3	4	5	
Adopt Entire Chapter																
Adopt Entire Chapter as amended (amended sections listed below)			X													
Adopt only those sections that are listed below																
Chapter / Section																
<u>802.2.1</u>			X													
<u>803.2</u>			X													
<u>803.3</u>			X													
<u>803.4</u>			X													
<u>803.4.1</u>			X													
<u>804.3</u>			X													
<u>804.4.1.2</u>			X													
<u>804.4.1.2.1</u>			X													
<u>804.5.3</u>			X													
<u>804.5.4.1</u>			X													
<u>804.6.1</u>			X													
<u>804.6.2</u>			X													
<u>804.7</u>			X													
<u>804.10</u>			X													
<u>804.10.1</u>			X													
<u>804.11</u>			X													
<u>806.2</u>			X													
<u>806.3</u>			X													

The state agency does not adopt sections identified with the following symbol: †
The Office of the State Fire Marshal’s adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 8 ALTERATIONS—LEVEL 2

User note:

About this chapter: Like Chapter 7, the purpose of this chapter is to provide detailed requirements and provisions to identify the required improvements in the existing building elements, building spaces and building structural system when a building is being altered. This chapter is distinguished from Chapters 7 and 9 by involving space reconfiguration that could be up to and including 50 percent of the area of the building. In contrast, Level 1 alterations (Chapter 7) do not involve space reconfiguration, and Level 3 alterations (Chapter 9) involve extensive space reconfiguration that exceeds 50 percent of the building area. Depending on the nature of alteration work, its location within the building, and whether it encompasses one or more tenants, improvements and upgrades could be required for the open floor penetrations, sprinkler system or the installation of additional means of egress such as stairs or fire escapes.

SECTION 801 GENERAL

apps

801.1 Scope.

apps

Level 2 alterations as described in Section 603 shall comply with the requirements of this chapter.

Exception: Buildings in which the reconfiguration is exclusively the result of compliance with the accessibility requirements of Section 306.7.1 shall be permitted to comply with Chapter 7.

801.2 Alteration Level 1 compliance.

apps

In addition to the requirements of this chapter, all work shall comply with the requirements of Chapter 7.

801.3 System installations.

apps

Requirements related to work area are not applicable where the Level 2 alterations are limited solely to one or more of the following:

1. Mechanical systems, electrical systems, fire protection systems and abatement of hazardous materials.
2. Windows, hardware, operating controls, electrical outlets and signs.
3. Alterations undertaken for the primary purpose of increasing the accessibility of a facility.

801.4 Compliance.

apps

New construction elements, components, systems and spaces shall comply with the requirements of the California Building Code.

Exceptions:

1. Where windows are added they are not required to comply with the light and ventilation requirements of the *California Building Code*.
2. Newly installed electrical equipment shall comply with the requirements of Section 806.
3. The length of dead-end corridors in newly constructed spaces shall only be required to comply with the provisions of Section 804.7.
4. The minimum ceiling height of the newly created habitable and occupiable spaces and corridors shall be 7 feet (2134 mm).
5. Where provided in below-grade transportation stations, existing and new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).
6. New structural members and connections shall be permitted to comply with alternative design criteria in accordance with Section 302.

SECTION 802 BUILDING ELEMENTS AND MATERIALS

apps

802.1 Scope.

apps

The requirements of this section are limited to work areas in which Level 2 alterations are being performed and shall apply beyond the work area where specified.

802.2 Vertical openings.

apps

Existing vertical openings shall comply with the provisions of Sections 802.2.1, 802.2.2 and 802.2.3.

802.2.1 Existing vertical openings.

apps

Existing interior vertical openings connecting two or more floors shall be enclosed with approved assemblies having a fire-resistance rating of not less than 1 hour with approved opening protectives.

Exceptions:

1. Where vertical opening enclosure is not required by the *California Building Code* or the *California Fire Code*.
2. Interior vertical openings other than stairways may be blocked at the floor and ceiling of the work area by installation of not less than 2 inches (51 mm) of solid wood or equivalent construction.
3. The enclosure shall not be required where:
 - 3.1. Connecting the main floor and mezzanines; or
 - 3.2. All of the following conditions are met:
 - 3.2.1. The communicating area has a low-hazard occupancy or has a moderate-hazard occupancy that is protected throughout by an automatic sprinkler system.
 - 3.2.2. The lowest or next-to-the-lowest level is a street floor.
 - 3.2.3. The entire area is open and unobstructed in a manner such that it is reasonable to assume that a fire in any part of the interconnected spaces will be readily obvious to all of the occupants.
 - 3.2.4. Exit capacity is sufficient to provide egress simultaneously for all occupants of all levels by considering all areas to be a single floor area for the determination of required exit capacity.

3.2.5. Each floor level, considered separately, has not less than one-half of its individual required exit capacity provided by an exit or exits leading directly out of that level without having to traverse another communicating floor level or be exposed to the smoke or fire spreading from another communicating floor level.

4. Reserved.

5. In Group B occupancies, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in [Section 802.2.1](#), shall not be required in the following locations:

5.1. Buildings not exceeding 3,000 square feet (279 m²) per floor.

5.2. Buildings protected throughout by an approved automatic fire sprinkler system.

6. In Group E occupancies, the enclosure shall not be required for vertical openings not exceeding **two stories where the building is protected** throughout by an approved automatic fire sprinkler system.

7. In Group F occupancies, the enclosure shall not be required in the following locations:

7.1. Vertical openings not exceeding two stories.

7.2. Special-purpose occupancies where necessary for manufacturing operations and direct access is provided to not fewer than one protected stairway.

7.3. Buildings protected throughout by an approved automatic sprinkler system.

8. Reserved.

9. In Group M occupancies, a minimum 30-minute enclosure shall be provided to protect all vertical openings not exceeding three stories. This enclosure, or the enclosure specified in [Section 802.2.1](#), shall not be required in the following locations:

9.1. Openings connecting only two floor levels.

9.2. Occupancies protected throughout by an approved automatic sprinkler system.

10. Reserved.

11. Reserved.

12. One- and two-family dwellings.

13. Group S occupancies where connecting not more than two floor levels or where connecting not more than three floor levels and the structure is equipped throughout with an approved automatic sprinkler system.

14. Group S occupancies where vertical opening protection is not required for open parking garages and ramps.

802.2.2 Supplemental shaft and floor opening enclosure requirements. apps

Where the work area on any floor exceeds 50 percent of that floor area, the enclosure requirements of [Section 802.2](#) shall apply to vertical openings other than stairways throughout the floor.

Exception: Vertical openings located in tenant spaces that are entirely outside the work area.

802.2.3 Supplemental stairway enclosure requirements. apps

Where the work area on any floor exceeds 50 percent of that floor area, stairways that are part of the means of egress serving the work area shall, at a minimum, be enclosed with smoke-tight

construction on the highest work area floor and all floors below.

Exception: Where stairway enclosure is not required by the California Building Code or the California Fire Code.

802.3 Smoke compartments.

apps

In Group I-2 occupancies where the work area is on a story used for sleeping rooms for more than 30 care recipients, the story shall be divided into not less than two compartments by smoke barrier walls in accordance with Section 407.5 of the California Building Code as required for new construction.

802.4 Interior finish.

apps

The interior finish and trim of walls and ceilings in exits and corridors in any work area shall comply with the requirements of the California Building Code.

Exception: Existing materials that do not comply with the requirements of the California Building Code shall be permitted to be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to achieve the required classification. Compliance with this section shall be demonstrated by testing the fire-retardant coating on the same material and achieving the required performance. Where the same material is not available, testing on a similar material shall be permitted.

802.4.1 Supplemental interior finish requirements.

apps

Where the work area on any floor exceeds 50 percent of the floor area, Section 802.4 shall apply to the interior finish and trim in exits and corridors serving the work area throughout the floor.

Exception: Interior finish within tenant spaces that are entirely outside the work area.

802.5 Guards.

apps

The requirements of Sections 802.5.1 and 802.5.2 shall apply in all work areas.

802.5.1 Minimum requirement.

apps

Every portion of a floor, such as a balcony or a loading dock, that is more than 30 inches (762 mm) above the floor or grade below and is not provided with guards, or those in which the existing guards are judged to be in danger of collapsing, shall be provided with guards.

802.5.2 Design.

apps

Where there are no guards or where existing guards must be replaced, the guards shall be designed and installed in accordance with the California Building Code.

802.6 Fire-resistance ratings.

apps

Where approved by the code official, buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the California Building Code has been added, and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code. The building is required to meet the other applicable requirements of the California Building Code.

Plans, investigation and evaluation reports, and other data shall be submitted indicating which building elements and materials the applicant is requesting the code official to review and approve for determination of applying the current building code fire-resistance ratings. Any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means-of-egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building that impact required fire-resistance ratings shall be identified in the evaluation reports submitted.

SECTION 803 FIRE PROTECTION

apps

803.1 Scope.

apps

The requirements of this section shall be limited to work areas in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.

803.1.1 Corridor ratings.

apps

Where an approved automatic sprinkler system is installed throughout the story, the required fire-resistance rating for any corridor located on the story shall be permitted to be reduced in accordance with the *California Building Code*. In order to be considered for a corridor rating reduction, such system shall provide coverage for the stairway landings serving the floor and the intermediate landings immediately below.

803.2 Automatic sprinkler systems.

apps

Automatic sprinkler systems shall be provided in accordance with the requirements of [Section 903 of the California Building and California Fire Codes](#).

803.3

Reserved.

apps

803.4 Fire alarm and detection.

apps

An approved fire alarm system shall be installed in accordance with *California Fire Code Sections 907 and 1103.7*.

803.4.1 Systems out of service.

apps

Existing fire alarm and detection systems shall be maintained in accordance with [Section 901.7 of the California Fire Code](#). Site fire protection during construction shall be in accordance with [Chapter 33 of the California Building and California Fire Codes](#).

SECTION 804 MEANS OF EGRESS

apps

804.1 Scope.

apps

The requirements of this section shall be limited to work areas that include exits or corridors shared by more than one tenant within the work area in which Level 2 alterations are being performed, and where specified they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.

804.2 General.

apps

The means of egress shall comply with the requirements of this section.

Exceptions:

1. Where the work area and the means of egress serving it complies with NFPA 101.
2. Means of egress complying with the requirements of the building code under which the building was constructed shall be considered to be compliant means of egress if, in the opinion of the code official, they do not constitute a distinct hazard to life.

804.3*Reserved.*

apps

804.4 Number of exits.

apps

The number of exits shall be in accordance with Sections 804.4.1 through 804.4.3.

804.4.1 Minimum number.

apps

Every story utilized for human occupancy on which there is a work area that includes exits or corridors shared by more than one tenant within the work area shall be provided with the minimum number of exits based on the occupancy and the occupant load in accordance with the California Building Code. In addition, the exits shall comply with Sections 804.4.1.1 and 804.4.1.2.

804.4.1.1 Single-exit buildings.

apps

A single exit or access to a single exit shall be permitted from spaces, any story or any occupied roof where one of the following conditions exists:

1. The occupant load, number of dwelling units and exit access travel distance do not exceed the values in Table 804.4.1.1(1) or Table 804.4.1.1(2).
2. In Group R-1 or R-2, buildings without an approved automatic sprinkler system, individual single-story or multiple-story dwelling or sleeping units shall be permitted to have a single exit or access to a single exit from the dwelling or sleeping unit provided one of the following criteria are met:
 - 2.1. The occupant load is not greater than 10 and the exit access travel distance within the unit does not exceed 75 feet (22 860 mm).
 - 2.2. The building is not more than three stories in height; all third-story space is part of dwelling with an exit access doorway on the second story; and the portion of the exit access travel distance from the door to any habitable room within any such unit to the unit entrance doors does not exceed 50 feet (15 240 mm).
3. In buildings of Group R-2 occupancy of any number of stories with not more than four dwelling units per floor served by an interior exit stairway; with a

smokeproof enclosure in accordance with [Sections 909.20](#) and [1023.12](#) of the *California Building Code* or an exterior stairway as an exit; and where the portion of the exit access travel distance from the dwelling unit entrance door to the exit is not greater than 20 feet (6096 mm).

TABLE 804.4.1.1(1)
STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

apps

STORY	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS
Basement, first or second story above grade plane	R-2 ^a	4 dwelling units
Third story above grade plane and higher	NP	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

- a. Group R-2, without an approved automatic sprinkler system and provided with emergency escape and rescue openings in accordance with [Section 1031](#) of the *California Building Code*.

TABLE 804.4.1.1(2)
STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

apps

STORY	OCCUPANCY	MAXIMUM OCCUPANT LOAD
First story above or below grade plane	B, F-2, S-2 ^a	300
Second story above grade plane	B, F-2, S-2 ^a	300
Third story above grade plane and higher	NP	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

- a. The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

804.4.1.2 Fire escapes required.

apps

Where more than one exit is required, an existing fire escape complying with [Section 804.4.1.2.1](#) shall be accepted as providing one of the required means of egress.

804.4.1.2.1 Fire escape access and details.

apps

Fire escapes shall comply with all of the following requirements:

1. Occupants shall have unobstructed access to the fire escape without having to pass through a room subject to locking.
2. Access to a fire escape shall be through a door, except that windows shall be permitted to provide access from single dwelling units or sleeping units in Group R-1 and R-2 occupancies or to provide access from spaces having a maximum occupant load of 10 in other occupancy classifications.
 - 2.1. The window shall have a minimum net clear opening of 5.7 square feet (0.53 m²) or 5 square feet (0.46 m²) where located at grade.
 - 2.2. The minimum net clear opening height shall be 24 inches (610 mm) and net clear opening width shall be 20 inches (508 mm).
 - 2.3. The bottom of the clear opening shall not be greater than 44 inches (1118 mm) above the floor.
 - 2.4. The operation of the window shall comply with the operational constraints of the *California Building Code*.
3. Newly constructed fire escapes shall be permitted only where exterior stairways cannot be utilized because of lot lines.
4. Openings within 10 feet (3048 mm) of fire escape stairways shall be protected by fire assemblies having minimum ³/₄-hour fire-resistance ratings.

Exception: Opening protection shall not be required in buildings equipped throughout with an approved automatic sprinkler system.

5. In all buildings of Group E occupancy, up to and including the 12th grade, buildings of Group I occupancy, rooming houses and childcare centers, ladders of any type are prohibited on fire escapes used as a required means of egress.

804.4.1.2.2 Construction.

apps

The fire escape shall be designed to support a live load of 100 pounds per square foot (4788 Pa) and shall be constructed of steel or other approved noncombustible materials. Fire escapes constructed of wood not less than nominal 2 inches (51 mm) thick are permitted on buildings of Type V construction. Walkways and railings located over or supported by combustible roofs in buildings of Types III and IV construction are permitted to be of wood not less than nominal 2 inches (51 mm) thick.

804.4.1.2.3 Dimensions.

apps

Stairways shall be not less than 22 inches (559 mm) wide with risers not more than, and treads not less than, 8 inches (203 mm). Landings at the foot of stairways shall be not less than 40 inches (1016 mm) wide by 36 inches (914 mm) long and located not more than 8 inches (203 mm) below the door.

804.4.2 Mezzanines.

Mezzanines in the work area and with an occupant load of more than 50 or in which the travel distance to an exit exceeds 75 feet (22 860 mm) shall have access to not fewer than two independent means of egress. apps

Exception: Two independent means of egress are not required where the travel distance to an exit does not exceed 100 feet (30 480 mm) and the building is protected throughout with an automatic sprinkler system.

804.4.3 Main entrance—Group A. apps

Buildings of Group A with an occupant load of 300 or more shall be provided with a main entrance capable of serving as the main exit with an egress capacity of not less than one-half of the total occupant load. The remaining exits shall be capable of providing one-half of the total required exit capacity.

Exception: Where a main exit is not well defined or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total width of egress is not less than 100 percent of the required width.

804.5 Egress doorways. apps

Egress doorways in any work area shall comply with [Sections 804.5.1](#) through 804.5.5.

804.5.1 Two egress doorways required. apps

Work areas shall be provided with two egress doorways in accordance with the requirements of [Sections 804.5.1.1](#) and 804.5.1.2.

804.5.1.1 Occupant load and travel distance. apps

In any work area, all rooms and spaces having an occupant load greater than 50 or in which the travel distance to an exit exceeds 75 feet (22 860 mm) shall have not fewer than two egress doorways.

Exceptions:

1. Storage rooms having a maximum occupant load of 10.
2. Where the work area is served by a single exit in accordance with [Section 804.4.1.1](#).

804.5.2 Door swing. apps

In the work area and in the egress path from any work area to the exit discharge, all egress doors serving an occupant load greater than 50 shall swing in the direction of exit travel.

804.5.2.1 Supplemental requirements for door swing. apps

Where the work area exceeds 50 percent of the floor area, door swing shall comply with [Section 804.5.2](#) throughout the floor.

Exception: Means of egress within or serving only a tenant space that is entirely outside the work area.

804.5.3 Door closing. apps

In any work area, all doors opening onto an exit passageway at grade or an exit stairway shall be self-closing or automatic-closing by listed closing devices.

Exception: Where exit enclosure is not required by the *California Building Code*.

804.5.3.1 Supplemental requirements for door closing.

apps

Where the work area exceeds 50 percent of the floor area, doors shall comply with Section 804.5.3 throughout the exit stairway from the work area to, and including, the level of exit discharge.

804.5.4 Panic and fire exit hardware.

apps

In any work area, and in the egress path from any work area to the exit discharge, in buildings or portions thereof of Group A assembly occupancies with an occupant load greater than 100, all required exit doors equipped with latching devices shall be equipped with approved panic or fire exit hardware in accordance with Section 1010.2.9 of the *California Building Code*.

804.5.4.1 Supplemental requirements for panic hardware.

apps

Where the work area exceeds 50 percent of the floor area, panic hardware shall comply with Section 804.5.4 throughout the floor.

804.6 Openings in corridor walls.

apps

Openings in corridor walls in any work area shall comply with Sections 804.6.1 through 804.6.4.

Exception: Openings in corridors where such corridors are not required to be rated in accordance with the *California Building Code*.

804.6.1 Corridor doors.

apps

Corridor doors in the *work area* shall not be constructed of hollow core wood and shall not contain louvers. Dwelling unit or sleeping unit corridor doors in work areas in buildings of Groups R-1 and R-2 shall be not less than 1³/₈-inch (35 mm) solid core wood or approved equivalent and shall not have any glass panels, other than approved wired glass or other approved glazing material in metal frames. Dwelling unit or sleeping unit corridor doors in work areas in buildings of Groups R-1 and R-2 shall be equipped with approved door closers. Replacement doors shall be 1³/₄-inch (44 mm) solid bonded wood core or approved equivalent.

Exceptions:

1. Corridor doors within a dwelling unit or sleeping unit.
2. *Reserved.*
3. Existing doors in buildings protected throughout with an approved automatic sprinkler system shall be required only to resist smoke, be reasonably tight fitting and shall not contain louvers.
4. In group homes with not more than 15 occupants and that are protected with an approved automatic detection system, closing devices are not required.
5. Door assemblies having a fire protection rating of not less than 20 minutes.

804.6.2 Transoms.

All transoms in corridor walls in work areas shall have a fire protection rating as required for the door and be permanently secured in the closed position or sealed with materials consistent with the corridor construction. apps

804.6.3 Other corridor openings. apps

In any work area, unless protected in accordance with [Section 716](#) of the California Building Code, any other sash, grille or opening in a corridor, and any window in a corridor not opening to the outside air, shall be sealed with materials consistent with the corridor construction.

804.6.3.1 Supplemental requirements for other corridor opening. apps

Where the work area exceeds 50 percent of the floor area, [Section 804.6.3](#) shall be applicable to all corridor windows, grills, sashes and other openings on the floor.

Exception: Means of egress within or serving only a tenant space that is entirely outside the work area.

804.6.4 Supplemental requirements for corridor openings. apps

Where the work area on any floor exceeds 50 percent of the floor area, the requirements of [Sections 804.6.1](#) through [804.6.3](#) shall apply throughout the floor.

804.7 Dead-end corridors. apps

Dead-end corridors in any work area shall not exceed 35 feet (10 670 mm).

Exceptions:

1. Where dead-end corridors of greater length are permitted by the [California Building Code](#).
2. In other than Group A occupancies, the maximum length of an existing dead-end corridor shall be 50 feet (15 240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the [California Building Code](#).
3. In other than Group A occupancies, the maximum length of an existing dead-end corridor shall be 70 feet (21 356 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the [California Building Code](#).
4. In other than Group A occupancies, the maximum length of an existing, newly constructed, or extended dead-end corridor shall not exceed 50 feet (15 240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the [California Building Code](#).

804.8 Means-of-egress lighting. apps

Means-of-egress lighting shall be in accordance with this section, as applicable.

804.8.1 Artificial lighting required. apps

Means of egress in all work areas shall be provided with artificial lighting in accordance with the requirements of the [California Building Code](#).

804.8.2 Supplemental requirements for means-of-egress lighting.

apps

Where the work area on any floor exceeds 50 percent of that floor area, means of egress throughout the floor shall comply with [Section 804.8.1](#).

Exception: Means of egress within or serving only a tenant space that is entirely outside the work area.

804.9 Exit signs.

apps

Exit signs shall be in accordance with this section, as applicable.

804.9.1 Work areas.

apps

Means of egress in all work areas shall be provided with exit signs in accordance with the requirements of the [California Building Code](#).

804.9.2 Supplemental requirements for exit signs.

apps

Where the work area on any floor exceeds 50 percent of that floor area, means of egress throughout the floor shall comply with [Section 804.9.1](#).

Exception: Means of egress within a tenant space that is entirely outside the work area.

804.10 Handrails.

apps

The requirements of [Section 804.10.1](#) shall apply to handrails from the work area floor to, and including, the level of exit discharge.

804.10.1 Design.

apps

Handrails shall be designed and installed in accordance with the provisions of the [California Building Code](#).

804.11 Refuge areas.

apps

Where alterations affect the configuration of an area utilized as a refuge area, the capacity of the refuge area shall not be reduced below the required capacity of the refuge area for horizontal exits in accordance with [Section 1026.4](#) of the [California Building Code](#). Where the horizontal exit also forms a smoke compartment, the capacity of the refuge area for Group B ambulatory care facilities shall not be reduced below that required in [Sections 407.5.3, 408.6.2, 420.6.1](#) and [422.3.2](#) of the [California Building Code](#), as applicable.

804.12 Guards.

apps

The requirements of [Sections 804.12.1](#) and [804.12.2](#) shall apply to guards from the work area floor to, and including, the level of exit discharge but shall be confined to the egress path of any work area.

804.12.1 Minimum requirement.

apps

Every open portion of a stairway, landing, or balcony that is more than 30 inches (762 mm) above the floor or grade below and is not provided with guards, or those portions in which

existing guards are judged to be in danger of collapsing, shall be provided with guards.

804.12.2 Design.

apps

Guards required in accordance with Section 804.12.1 shall be designed and installed in accordance with the California Building Code.

SECTION 805 STRUCTURAL

apps

[BS] 805.1 General.

apps

Structural elements and systems within buildings undergoing Level 2 alterations shall comply with this section.

[BS] 805.2 Existing structural elements carrying gravity loads.

apps

Any existing gravity load-carrying structural element for which an alteration causes an increase in design dead, live or snow load, including snow drift effects, of more than 5 percent shall be replaced or altered as needed to carry the gravity loads required by the California Building Code for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the alteration shall be shown to have the capacity to resist the applicable design dead, live and snow loads, including snow drift effects, required by the California Building Code for new structures.

Exceptions:

1. Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the altered building complies with the conventional light-frame construction methods of the California Building Code or the provisions of the California Residential Code.
2. Buildings in which the increased dead load is attributable to the addition of a second layer of roof covering weighing 3 pounds per square foot (0.1437 kN/m²) or less over an existing single layer of roof covering.

[BS] 805.3 Existing structural elements resisting lateral loads.

apps

Except as permitted by Section 805.4, where the alteration increases design lateral loads, or where the alteration results in prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall meet the requirements of Sections 1609 and 1613 of the California Building Code. Reduced seismic forces shall be permitted.

Exception: Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is not more than 10 percent greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with Sections 1609 and 1613 of the California Building Code. Reduced seismic forces shall be permitted. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces and capacities shall account for the cumulative effects of additions and alterations since original construction.

[BS] 805.4 Voluntary lateral force-resisting system alterations.

apps

Structural alterations that are intended exclusively to improve the lateral force-resisting system and are not required by other sections of this code shall not be required to meet the requirements of Section 1609 or Section 1613 of the *California Building Code*, provided that the following conditions are met:

1. The capacity of existing structural systems to resist forces is not reduced.
2. New structural elements are detailed and connected to existing or new structural elements as required by the *California Building Code* for new construction.
3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the *California Building Code* for new construction.
4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

**SECTION 806
ELECTRICAL**

apps

806.1 New installations.

apps

Newly installed electrical equipment and wiring relating to work done in any work area shall comply with all applicable requirements of the *California Electrical Code* except as provided for in Section 806.4.

806.2 Existing installations.

apps

Existing wiring in all work **areas in Group A-1, A-2 and A-5 occupancies shall be** upgraded to meet the materials and methods requirements of Chapter 7.

806.3*Reserved.*

apps

806.4 Residential occupancies.

apps

In Group R-2, R-3 and R-4 occupancies and buildings regulated by the *California Residential Code*, the requirements of Sections 806.4.1 through 806.4.7 shall be applicable only to work areas located within a dwelling unit.

806.4.1 Enclosed areas.

apps

Enclosed areas, other than closets, kitchens, basements, garages, hallways, laundry areas, utility areas, storage areas and bathrooms shall have not fewer than two duplex receptacle outlets or one duplex receptacle outlet and one ceiling or wall-type lighting outlet.

806.4.2 Kitchens.

apps

Kitchen areas shall have not fewer than two duplex receptacle outlets.

806.4.3 Laundry areas.

apps

Laundry areas shall have not fewer than one duplex receptacle outlet located near the laundry equipment and installed on an independent circuit.

806.4.4 Ground fault circuit interruption.

apps

Newly installed receptacle outlets shall be provided with ground fault circuit interruption as required by the California Electrical Code.

806.4.5 Minimum lighting outlets.

apps

Not fewer than one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage and detached garage with electric power, and to illuminate outdoor entrances and exits.

806.4.6 Utility rooms and basements.

apps

Not fewer than one lighting outlet shall be provided in utility rooms and basements where such spaces are used for storage or contain equipment requiring service.

806.4.7 Clearance for equipment.

apps

Clearance for electrical service equipment shall be provided in accordance with the California Electrical Code.

SECTION 807 MECHANICAL

apps

807.1 Reconfigured or converted spaces.

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Reconfigured spaces intended for occupancy and spaces converted to habitable or occupiable space in any work area shall be provided with natural or mechanical ventilation in accordance with the California Mechanical Code.

Exception: Existing mechanical ventilation systems shall comply with the requirements of Section 807.2.

807.2 Altered existing systems.

apps

In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured or extended shall provide not less than 5 cubic feet per minute (cfm) (0.0024 m³/s) per person of outdoor air and not less than 15 cfm (0.0071 m³/s) of ventilation air per person, or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE 62.1.

807.3 Local exhaust.

Newly introduced

devices, equipment or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities as to affect adversely or impair health or cause discomfort to occupants shall be provided with local exhaust.