



GROUND  BOUNDLESS

2022 Ca Building Code Disabled Access

SIGNIFICANT CHANGES & 2021 MID CYCLE UPDATES

**KERN COUNTY BUILDING AND CODE DIVISION
2700 M STREET, BAKERSFIELD, CA 93301
661.862.8681
WWW.KERNPUBLICWORKS.COM**

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Table of Contents Disabled Access Changes

- ▶ 2022 California Building Code Disabled Access Significant Changes
 - ▶ 11B-206 Subsection deletion and relocation to 11B-207.1 ex #4 and ex#5
 - ▶ 11B-224.7.1 and 11B-224.7.2, split 2019 224.7.1 into mobility (accessible) to itself and 224.7.2 into adaptable.
- ▶ 2021 California Building Code Disabled Access Mid-Cycle Amendments
 - ▶ Section 202: 7 changed, added, or deletions to definitions
 - ▶ Division 2 Scoping changes: 19 changes
 - ▶ Division 3 Building Blocks: 3 changes
 - ▶ Division 4 Accessible Routes: 5 changes
 - ▶ Division 5 General Site and Building Elements: 4 changes
 - ▶ Division 6 Plumbing Elements and Facilities: 5 changes
 - ▶ Division 7 Communication Elements and Features: 3 changes
 - ▶ Division 8 Special rooms, spaces, and elements: 7 changes

2022 Ca Building Code Disabled Access Significant Changes

1. ***11B-206.4.1 Entrances and exterior ground floor exits.*** *All entrances ~~and exterior ground floor exits to buildings and facilities~~ shall comply with Section 11B-404.*

Exceptions:

1. *~~Exterior ground floor exits serving smoke proof enclosures, stairwells, and exit doors serving stairs only shall not be required to comply with Section 11B-404.~~*
2. *~~Exits in excess of those required by Chapter 10, and which are more than 24 inches (610 mm) above grade shall not be required to comply with Section 11B-404. Directional signs shall comply with Chapter 10, Section 1009.10.~~*

2. 11B-207 Accessible means of egress

11B-207.1 General. Means of egress shall comply with *Chapter 10, section 1009 and section 11B-207.*

Exceptions:

1. Where means of egress are permitted by local building or life safety codes to share a common path of egress travel, accessible means of egress shall be permitted to share a common path of egress travel.
2. Areas of refuge shall not be required in detention and correctional facilities.
3. *Accessible means of egress are not required to be provided in existing buildings.*
4. *Doors that provide access only to interior or exterior stairways shall not be required to comply with Section 11B-404.*
5. *Exits in excess of those required by Chapter 10, and which are more than 24 inches above grade shall not be required to comply with section 11B-404 or be on an accessible route. Directional signs shall be provided in compliance with Chapter 10, section 1009.10.*

Final Express Terms published by the Division of State Architect. No longer available to my knowledge.

Definitions:

- Blended Transition (modified)
- Bottle filling station (added)
- Circulation Path (modified)
- Curb Ramp (modified)
- Detectible warnings (modified)
- *Drive Aisle (added)*
- *Driveway (added)*
- ~~*Pedestrian Way*~~
- *Public Housing * (modified)*
- *Public Use (modified)*

Public Housing definition has been significantly increased. See: [“Guide to Public Housing Regulated by Chapter 11B of the California Building Code”](#) published by Ca Department of General Services, Division of the State Architect.

APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION

JULY 14 & 15, 2020

AUGUST 13, 2020

NOVEMBER 5, 2020

**FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE DIVISION OF THE STATE ARCHITECT
REGARDING THE 2019 CALIFORNIA BUILDING CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2
(DSA-AC 01-19)**

The state agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

If using assistive technology, please adjust your settings to recognize underline, strikethrough, italic and ellipsis.

LEGEND for EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

1. Model Code language appears upright
2. Existing California amendments appear in *italic*
3. Amended model code or new California amendments appear *underlined & italic*
4. Repealed model code language appears ~~upright and in strikethrough~~
5. Repealed California amendments appear in ~~*italic and strikethrough*~~
6. Ellipsis (...) indicate existing text remains unchanged

FINAL EXPRESS TERMS

**CHAPTER 1
SCOPE AND ADMINISTRATION
DIVISION I
CALIFORNIA ADMINISTRATION**

Item 1.01

**SECTION 1.9
DIVISION OF THE STATE ARCHITECT**

1.9.1 Division of the State Architect—Access Compliance.

1.9.1.3 Application — public housing and private housing available for public use. See Government Code Sections 4450 and Section 12955.1(c) and the definition for public housing in Chapter 2.

11B-233 Public Housing

- ▶ 11B-233.3.1.1 Residential Dwelling Units with Mobility Features.
 - ▶ 5% but no fewer than one of the total number of dwelling units shall comply with 11B-809.2 (Accessible routes), 11B-809.3 (Kitchens 11B-804), 11B 809.4 (Toilet and Bathing Facilities).
- ▶ 11B-233.3.1.2 Residential Dwelling Units with Adaptable Features.
 - ▶ Added sections 11B-809.6 through 11B-809.12 - Adaptable feature technical requirements.
 - ▶ Section also scopes which dwelling units are to be adaptable, i.e. elevator buildings, non-elevator buildings, ground floors above grade, multistory buildings, etc. Similar to typical 11A requirements.

11B-247 Detectible Warnings

Deleted Hazardous Vehicular Areas, and added Blended Transitions. Note relationship between added section 11B-250 circulation paths, curb ramps, and blended transitions.

- ▶ ~~Hazardous Vehicular Area~~
- ▶ 11B-247.1.2.5 Blended transitions. Blended transitions shall have detectable warnings complying with Sections 11B-705.1.1 and 11B-705.1.2.5.

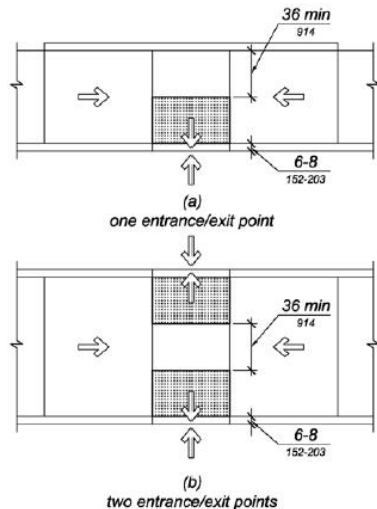


FIGURE 11B-705.1.2.2.2
PARALLEL CURB RAMPS

- Added section 11B-705.1.2.2 clarifying use of detectible warnings at standard curb ramps and parallel curb ramps.
- Illustration at left from 2019 CBC Sect 11B-705.1.2.2.2 showing min 36" wide detectible warning surface with min 36" wide clear space for pedestrian travel.
- Detectible warning to be placed min 6" from vehicular way and 8" maximum.

11B-250 Circulation Paths (added).

- ▶ Circulation paths contiguous to vehicular traffic shall be physically separated from vehicular traffic. Vehicular traffic includes travel through parking facilities, into and out of parking spaces, into and out of electric vehicle charging spaces, and along roadways, driveways and drive aisles. Physical separation shall be provided with circulation paths raised 4 inches (102 mm) minimum above the area where vehicular traffic occurs.

- ▶ Exceptions:

1. Curb ramps and blended transitions with detectable warnings complying with Section 11B-247 may be used to connect raised circulation paths and pedestrian crossings within areas of vehicular traffic...
2. At locations where sidewalks and walks in the public right-of-way cross driveways without yield or stop traffic control, compliance with this section shall not be required.
3. At locations where circulation paths cross driveways or drive aisles, circulation paths shall not be required to comply with this section and detectable warnings shall not be permitted. Beyond the crossing where continuation of the circulation path within a parking facility leads immediately to and does not continue beyond only parking spaces complying with Section 11B-502, passenger drop-off and loading zones complying with Section 11B-503 and electric vehicle charging stations complying with Section 11B-812, the circulation path shall not be required to be raised.
4. In alterations to existing parking facilities, including alterations required by Section 11B-202.4, physical separation may be provided with detectable warnings complying with Sections 11B-247 and 11B-705.1 in lieu of raised circulation paths.
5. Access aisles serving any electric vehicle charging station vehicle spaces complying with Section 11B-812...
6. At each electric vehicle charging station complying with Section 11B-812 where the charger and its controls are oriented toward the vehicle space it serves and the charger's clear floor spaces for operable parts and point-of-sale devices are at the same elevation as the vehicle space, the accessible route complying with Section 11B-812.5.2 shall not be required to comply with this section.

PLUMBING & MECHANICAL

SIGNIFICANT CHANGES

PLUMBING OCCUPANT LOAD FACTOR			
	2019 CPC	2022 CPC	% Increase
ASSEMBLY - Without fixed seating			
Auditorium, indoor sports, worship, arcade, gaming (standing)	15	11	27%
Waiting, terminal	30	15	50%
Conference, dining/drinking, lounge	30	30	0%
Gallery, museum	30	30	0%
ASSEMBLY - Fixed Seating			
	30*	CBC 1004.6, 50% of fixed seating value	0%
Business	200	150	25%
dormitory	200	50	75%
Day Care	50	35	30%
Education (K-12)	50	30	40%
Education (Post Secondary)	50	50	0%
Exercise	200	50	75%
Industrial	2000	500	75%
Kitchen/Food Prep	200	50	75%
Laboratory (Educational)	200	50	75%
Laboratory (Non-Educational)	200	100	50%
Library	-	50	-
Mercantile	200	100	50%
Mall Building	-	CBC 402.8.2	-
Residential	200	200	0%
Warehouse (Storage Portions)	5000	4000	20%
Warehouse (Distribution)	-	500	-

* Similar verbage of 2022 CPC.

Table A Occupant Load Factors

- Expanded occupancy groups
- Increased occupant load factors for certain occupancies.
- Most notable increases are business, distribution warehouse, exercise, dormitory Merchantile occupancies, et al.

PLUMBING & MECHANICAL SIGNIFICANT CHANGES

- ▶ Table 703.2 Maximum Unit Loading and Length of DWV piping.
 - ▶ 1½” horizontal maximum units = 1 DFU, vertical = 2 DFU.
 - ▶ Footnote #7: Up to 8 public lavatories are permitted to be installed on a 1½” vert/horiz branch sloped at ¼”/ft.
 - ▶ 3” horizontal max DFU = 35, vert = 48
 - ▶ Footnote #4: Not to exceed five water closets or five six-unit traps. This was previous limited to three water closets.
- ▶ Table 702.1 Drainage Fixture Unit Values.
 - ▶ Shower, single-head trap = 2 DFU with min trap arm and drain size of 2”.
 - ▶ Footnote #9: For a bathtub to shower retrofit, a 1½” trap and trap arm shall be permitted with a maximum shower size of 36”x60.” See section 408.5 & 408.6 (shower compartment requirements).
- ▶ SB 1194??

2022 Electrical

SIGNIFICANT CHANGES

► 110.22(A) Identification of Disconnecting Means

Each disconnecting means shall be legibly marked to indicate its purpose unless located and arranged so the purpose is evident. **In other than one- or two-family dwellings, the marking shall include the identification of the circuit source that supplies the disconnecting means.** The marking shall be of sufficient durability to withstand the environment involved.

2022 Electrical

SIGNIFICANT CHANGES

► 110.26(C)(2) Large Equipment

For **large equipment** that contains overcurrent devices, switching devices, or control devices, there shall be one entrance to and egress from the required working space not less than 610 mm (24 in.) wide and 2.0 m (6 1/2 ft) high at each end of the working space. **This requirement shall apply to either of the following conditions:**

(1) For equipment rated 1200 amperes or more and over 1.8 m (6 ft) wide

(2) For service disconnecting means installed in accordance with 230.71 where the combined ampere rating is 1200 amperes or more and over 1.8 m (6 ft) wide

Open equipment doors shall not impede the entry to or egress from the working space.

2022 Electrical

SIGNIFICANT CHANGES

▶ 210.8 (A) GFCI

▶ OLD 2019

All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in 210.8(A)(1) through (10) shall have ground-fault circuit-interrupter protection for personnel.

▶ NEW 2022

All 125-volt through 250-volt receptacles installed in the locations specified in 210.8(A)(1) through (A)(11) and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel.

2022 Electrical

SIGNIFICANT CHANGES

- ▶ 210.8(F) GFCI Protection for Outdoor Outlets

- ▶ **N** (F) Outdoor Outlets

- ▶ All outdoor outlets for dwellings, other than those covered in 210.8(A)(3), Exception to (3), that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel.
 - ▶ Exception: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8(C).

2022 Electrical

SIGNIFICANT CHANGES

- ▶ **N** 210.52 (C)(2) Island and Peninsular Countertops and Work Surfaces
- ▶ Receptacle outlets shall be installed in accordance with 210.52(C)(2)(a) and (C)(2)(b).
- ▶ (a) At least one receptacle shall be provided for the first 0.84 m² (9 ft²), or fraction thereof, of the countertop or work surface. A receptacle outlet shall be provided for every additional 1.7 m² (18 ft²), or fraction thereof, of the countertop or work surface.
- ▶ (b) At least one receptacle outlet shall be located within 600 mm (2 ft) of the outer end of a peninsular countertop or work surface. Additional required receptacle outlets shall be permitted to be located as determined by the installer, designer, or building owner. The location of the receptacle outlets shall be in accordance with 210.52(C)(3).

2022 Electrical

SIGNIFICANT CHANGES

- ▶ 210.52 (C)(2) Island and Peninsular Countertops and Work Surfaces

Total Square Footage of Countertop	Minimum Number of Receptacles
9 sq. ft. or Less	1
9+ sq. ft. up to 27 sq. ft.	2
27+ sq. ft. up to 45 sq. ft.	3
45+ sq. ft. up to 63 sq. ft.	4

2022 Electrical

SIGNIFICANT CHANGES

- ▶ 225.30(B) Buildings or Other Structures Supplied by a Feeder(s) or Branch Circuit(s)
- ▶ **N** (B) Common Supply Equipment
- ▶ Where feeder conductors originate in the same panelboard, switchboard, or other distribution equipment, and each feeder terminates in a single disconnecting means, not more than six feeders shall be permitted. Where more than one feeder is installed in accordance with this section, all feeder disconnects supplying the building or structure shall be grouped in the same location, and the requirements of 225.33 shall not apply. Each disconnect shall be marked to indicate the load served.
- ▶ 225.33 is for maximum number of disconnects.

2022 Electrical

SIGNIFICANT CHANGES

- ▶ **N** 230.67 Surge-Protective Device
- ▶ **N** (A) Surge-Protective Device.
 - ▶ All services supplying dwelling units shall be provided with a surge-protective device (SPD).
- ▶ **N** (B) Location.
 - ▶ The SPD shall be an integral part of the service equipment or shall be located immediately adjacent thereto.
 - ▶ Exception: The SPD shall not be required to be located in the service equipment as required in (B) if located at each next level distribution equipment downstream toward the load.

2022 Electrical

SIGNIFICANT CHANGES

- ▶ **N** 230.67 Surge-Protective Device
- ▶ **N** (C) Type.
 - ▶ The SPD shall be a Type 1 or Type 2 SPD.
- ▶ **N** (D) Replacement.
 - ▶ Where service equipment is replaced, all of the requirements of this section shall apply.

2022 Electrical

SIGNIFICANT CHANGES

- ▶ 230.71 Maximum Number of Disconnects.
- ▶ Each service shall have only one disconnecting means unless the requirements of 230.71(B) are met.

2022 Electrical

SIGNIFICANT CHANGES

- ▶ 203.71 (B) **Two to Six Service Disconnecting Means.**
- ▶ Two to six service disconnects shall be permitted for each service permitted by 230.2 or for each set of service-entrance conductors permitted by 230.40, Exception No. 1, 3, 4, or 5. The two to six service disconnecting means shall be permitted to consist of a combination of any of the following:
 - ▶ (1) Separate enclosures with a main service disconnecting means in each enclosure
 - ▶ (2) Panelboards with a main service disconnecting means in each panelboard enclosure
 - ▶ (3) Switchboard(s) where there is only one service disconnect in each separate vertical section where there are barriers separating each vertical section
 - ▶ (4) Service disconnects in switchgear or metering centers where each disconnect is located in a separate compartment

2022 Electrical

SIGNIFICANT CHANGES

NEW ARTICLE 242 Overvoltage Protection

N 242.1 Scope

This article provides the general requirements, installation requirements, and connection requirements for overvoltage protection and overvoltage protective devices. Part II covers surge-protective devices (SPDs) permanently installed on premises wiring systems of not more than 1000 volts, nominal, while Part III covers surge arresters permanently installed on premises wiring systems over 1000 volts, nominal.

2022 Electrical

SIGNIFICANT CHANGES

ARTICLE 408 - SWITCHBOARDS, SWITCHGEAR, AND PANELBOARDS

- ▶ **N** 408.6 Short-Circuit Current Rating
- ▶ Switchboards, switchgear, and panelboards shall have a short-circuit current rating not less than the available fault current. In other than one- and two-family dwelling units, the available fault current and the date the calculation was performed shall be field marked on the enclosure at the point of supply. The marking shall comply with 110.21(B)(3).

2022 Electrical

SIGNIFICANT CHANGES

- ▶ **N 408.43 Panelboard Orientation.**
- ▶ Panelboards shall not be installed in the face-up position.

2022 Electrical

SIGNIFICANT CHANGES

Appliances

422.5 Ground-Fault Circuit-Interrupter (GFCI) Protection for Personnel.

(A) General

Appliances identified in 422.5(A)(1) through (A)(7) rated 150 volts or less to ground and 60 amperes or less, single- or 3-phase, shall be provided with Class A GFCI protection for personnel. Multiple Class A GFCI protective devices shall be permitted but shall not be required.

- (1) Automotive vacuum machines
- (2) Drinking water coolers and bottle fill stations
- (3) Cord-and-plug-connected high-pressure spray washing machines
- (4) Tire inflation machines
- (5) Vending machines
- (6) Sump pumps
- (7) Dishwashers

2022 Electrical

SIGNIFICANT CHANGES

▶ ARTICLE 445 - GENERATORS

445.18 **Disconnecting Means and Emergency Shutdown.**

▶ (N) (C) Remote Emergency Shutdown

Generators with greater than 15 kW rating shall be provided with a remote emergency stop switch to shut down the prime mover. The remote emergency stop switch shall be located outside the equipment room or generator enclosure and shall also meet the requirements of 445.18(B)(1) and (B)(2).

▶ (N) (D) Emergency Shutdown in One- And Two-Family Dwelling Units

For other than cord-and-plug-connected portable generators, an emergency shutdown device shall be located outside the dwelling unit at a readily accessible location.

2022 Electrical

SIGNIFICANT CHANGES

ARTICLE 680 - SWIMMING POOLS, FOUNTAINS, AND SIMILAR INSTALLATIONS

- ▶ **680.21 Motors (C) GFCI Protection.**
- ▶ Outlets supplying all pool motors on branch circuits rated 150 volts or less to ground and 60 amperes or less, single- or 3-phase, shall be provided with Class A ground-fault circuit-interrupter protection.
- ▶ Exception: Listed low-voltage motors not requiring grounding, with ratings not exceeding the low-voltage contact limit that are supplied by listed transformers or power supplies that comply with 680.23(A)(2), shall be permitted to be installed without GFCI protection.

2022 Electrical

SIGNIFICANT CHANGES

ARTICLE 680 - SWIMMING POOLS, FOUNTAINS, AND SIMILAR INSTALLATIONS

- ▶ **N 680.21 Motors (D) Pool Pump Motor Replacement.**
- ▶ Where a pool pump motor in 680.21(C) is replaced for maintenance or repair, the replacement pump motor shall be provided with ground-fault circuit-interrupter protection.

2022 Electrical

SIGNIFICANT CHANGES

Thank You