



CCDA | California Commission
on Disability Access

DGS CALIFORNIA DEPARTMENT OF
GENERAL SERVICES



A Guide to Accessible Parking for the Construction Industry

* CBC 2022 Edition



* Publication: 05-15-2024, This document is based on the California Building Code 2022 edition and will not be updated unless there are relevant changes to the code.



Please note that this toolkit is not an exhaustive list of the elements and spaces required to be accessible per the 2022 California Building Code (CBC). While parking facilities used by the public are required to be accessible under both the Americans With Disabilities Act (ADA) and the CBC, the provisions within the CBC are more restrictive than the requirements of the ADA. Thus, the scoping and technical provisions herein refer only to their associated sections of the CBC.

Please refer to the California Building Code for all accessibility compliance requirements.¹

List of Abbreviations Used:

- ADA:** Americans with Disabilities Act
- CASp:** Certified Access Specialist
- CalCAP:** California Capital Access Program
- CBC:** California Building Code
- CCDA:** California Commission on Disability Access
- CFILC:** California Foundation for Independent Living Centers
- CSLB:** Contractors State License Board
- DSA:** Division of the State Architect
- EVCS:** Electric Vehicle Charging Stations
- ISA:** International Symbol of Accessibility

¹ International Code Council (ICC). 2022 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, VOLUMES 1, Chapter 11B. Accessed March 3, 2024. <http://codes.iccsafe.org/content/CABC2022P1/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing>.

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How to Use This Toolkit

Did you know that at least one-third of formal complaints involve issues with accessible parking and accessible routes?

The following toolkit and educational information are intended to help you avoid those complaints. This toolkit is not intended to be used as a checklist in lieu of the specific requirements in the CBC. Rather, the purpose is to provide awareness, generally summarize the requirements, and provide information about available resources for improvements. This information is not intended to substitute for an evaluation by a Certified Access Specialist (CASp) or licensed design professional, or for competent financial or legal advice.



Introduction

The California Commission on Disability Access (CCDA) promotes disability access in California through collaboration with stakeholders and businesses. The CCDA worked with the Contractors State License Board (CSLB) and industry experts to develop this guide for the construction industry to promote compliance with accessibility requirements in the construction of parking lots for public use.

This guide draws from the accessibility requirements in the CBC. The scoping and technical requirements for accessibility in the CBC must be considered in the design, construction, and alteration of parking facilities. Not only are they important for ensuring the right to accessibility to businesses open to the public; if a contractor disregards a regulation related to accessibility in construction, their license could be subject to discipline by the CSLB, and they may be exposed to civil liability. This can be prevented by ensuring the project meets minimum requirements. This document will only address requirements related to parking facilities.

Some local jurisdictions may allow the design for construction or alteration of parking facilities to be completed by a contractor. Where that is the case, pay particular attention to the clues herein leading you to consult with the Authority Having Jurisdiction (AHJ).

California Building Code Chapter 11B

If you are involved with the design of a parking facility you must become familiar with the provisions of CBC Chapter 11B.

Division 1 describes the application and administration of the rest of the chapter. Of significance here is the discussion on conventions in 11B-104. Here is where you will find the information about dimensional tolerance and always rounding up when calculating percentages for numbers of fixtures or facilities.

Division 2 provides scope requirements for elements required to be accessible. This is where you will find information regarding the quantities of elements and facilities of given types that are required to be accessible. It is always prudent to consult this division before embarking on any design decisions.

Division 3 presents the technical building blocks required to make various elements and features accessible. This is where you will find information on accessible route floor and ground surface, change of level, allowable opening, protruding objects and other requirements that may relate to elements in a parking facility.

Division 4 provides technical requirements for the accessible route. This section includes requirements for slope and width of the accessible route along with requirements for ramps, curb ramps, elevators and platform lifts, which all may exist in a parking facility.

Division 5 includes the technical requirements for general site and building elements. This is where information can be located regarding parking space size and marking requirements. This division also includes requirements for the vertical clearance at parking spaces, access aisles and vehicular routes serving them.

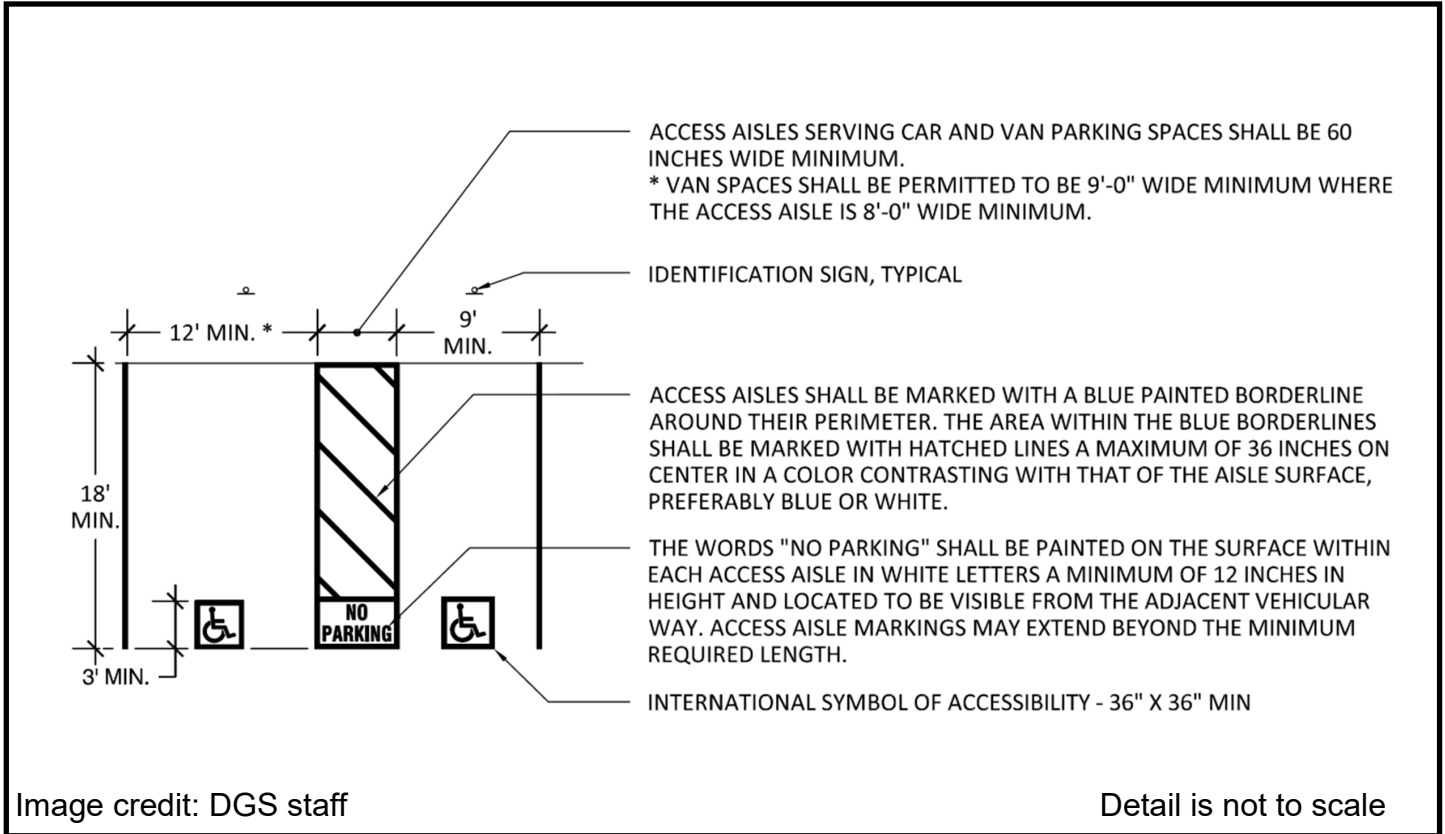
Division 7 provides the technical requirements for communication elements and features. This is where you will find information about signage requirements, the International Symbol of Accessibility (ISA) and detectable warnings.

Division 8 includes the technical requirements for special rooms, spaces and elements. This is where the requirements for electric vehicle charging station size and markings are located.²

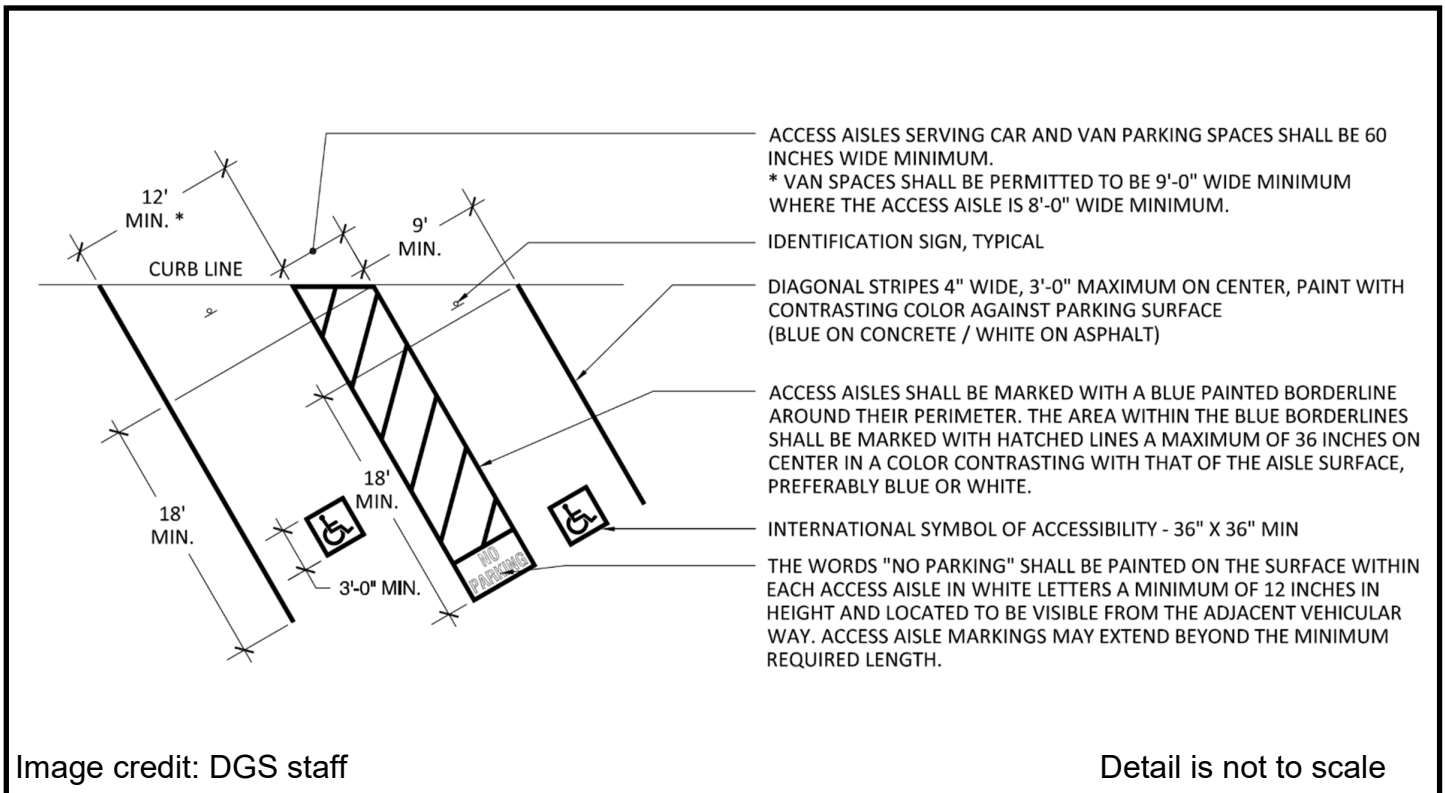
There are other divisions in Chapter 11B, but they are unlikely to be applicable to parking facilities. Nevertheless, if you intend to undertake the design of a facility, you should make yourself aware of all divisions of the chapter. Similarly, there are other codes and regulations that may apply to your project. If you are unsure, consult your AHJ.

² International Code Council (ICC). 2022 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, VOLUMES 1, Chapter 11B. Accessed March 3, 2024. <http://codes.iccsafe.org/content/CABC2022P1/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing>.

Perpendicular Accessible Parking Space:



Angled Accessible Parking Space:



Considerations Prior to Starting

The contractor must address slope requirements at all stages of construction including:

- Subgrade operations
- Aggregate base/sub-base operations
- Paving operations
- Concrete
- Hot-mix asphalt (HMA)

Construct areas such that finish slopes are less than the maximum requirements.

Construct gradual transitions from areas to adjacent parking spaces and drive aisles and avoid abrupt transitions.

Installation Crew Tool List

To properly verify slopes during each phase of construction measure subgrade, aggregate base, and paving with:

- 2' smart level, pulling string line
- Ensure slopes are verified during each phase of construction before placing materials
- Check adjacent curb reveals

Quality Assurance Approach to Achieve Compliance Considerations – Understand the Tolerances

Concrete

Prior to placing concrete:

- Check slopes of sub-base
- During layout string line slopes
- Verify final slopes during form check

During concrete placement:

- Check slopes after initial concrete placement
- Check slopes during finishing of concrete
- Check slopes prior to brooming

HMA Placement

Prior to Placing HMA:

- Check slopes of sub-base
- During layout string line slopes

During HMA placement:

- Check slopes after initial HMA laydown
- Check slopes during HMA rolling/compaction
- Check slopes after final HMA rolling/compaction

Accuracy and Precision

- Wheel stops are required when the front end of the vehicle will encroach into the required accessible route.
- When required, locate the wheel stop as per the approved drawings.
- Install required sign. If post mounted, install in accordance with CBC 11B-307.3.
- Bollards may be installed to protect post-mounted sign, but they may not intrude on the required parking space, access aisle or accessible route.
- Markings for accessible parking spaces shall be per CBC 11B-502.
- Markings for accessible EVCS shall be per CBC 11B-812.

Attention to detail:

- Follow CBC 11B-208.2 to calculate the number of accessible parking spaces required.
- Must also have a sign warning of unauthorized parking in designated accessible spaces per CBC 11B-502.8.
- Accessible parking spaces must be located on the closest accessible route to an accessible entrance.

Drawings Must Include:

- Compliant dimensional ranges or be absolute
- ISA dimensions
- Height clearance on post-mounted signs
- Letter size and dimensions of signs

This is not a checklist to self-determine accessibility compliance. If you are also acting as the designer, you are responsible for a fully accessible design.

What is a Certified Access Specialist?

Some building owners will elect to hire a CASp as a member of their project team and some local AHJs employ inspectors that are also CASp certified. If this is the case on your project you may need to interact with this individual in the field, and understanding their contribution can be helpful.

CASp stands for Certified Access Specialist, an individual holding a valid certification of certified access specialist, which is administered by the Division of the State Architect (DSA).

A CASp can provide the following services:

1. Review of facility plans and specifications for compliance with applicable state and federal accessibility laws, standards, codes and regulations.
2. Investigate a facility for compliance with applicable state and federal accessibility laws, standards, codes and regulations.
3. Conduct accessibility research, prepare accessibility reports, and/or conduct accessibility inspections, as authorized.
4. Issue CASp Inspection Reports and Disability Access Inspection Certificates in accordance with the requirements of Civil Code Section 55.53.³

For more information regarding CASp property inspection, visit the DSA CASp website:

www.dgs.ca.gov/casp

Maintenance and Alterations

An alteration project to a building or parking area will likely trigger the requirement to update accessibility features in those areas to comply with current code requirements.

However, alterations of existing parking lots by resurfacing and/or restriping shall be limited to the actual scope of work of the project and shall not be required to comply with CBC 11B-202.4.

Check with the AHJ (e.g., city, county, building department) about requirements.



The adjusted construction cost is used to determine the amount of access barrier removal required for each project in accordance with CBC 11B-202.4, Exception 8.

³ "CASp Property Inspection." <http://www.dgs.ca.gov>. Accessed November 18, 2022.

Accessible Parking Location

Accessible parking spaces must be on the shortest accessible route to an accessible entrance in compliance with CBC section 11B-208.3. Where parking serves more than one accessible entrance, parking stalls complying with CBC Section 11B-502 shall be dispersed and located on the shortest accessible route to the accessible entrances.⁴



Understanding Accessible Routes

An accessible route is a continuous, unobstructed path connecting accessible elements and spaces of an accessible site, building or facility that can be negotiated by a person with a disability using a wheelchair, and that is also safe for and usable by persons with other disabilities.

Interior accessible routes must connect all accessible elements and spaces within the building and may include corridors, hallways, floors, ramps, elevators and lifts.

Exterior accessible routes begin at site arrival points, such as accessible parking spaces and the public sidewalk, and may include elements such as parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps and lifts.⁵



⁴ International Code Council (ICC). 2022 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, VOLUMES 1, Chapter 11B. Accessed March 3, 2024. <http://codes.iccsafe.org/content/CABC2022P1/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing>.

⁵ International Code Council (ICC). 2022 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, VOLUMES 1, Chapter 11B. Accessed March 3, 2024. <http://codes.iccsafe.org/content/CABC2022P1/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing>.

Curb Ramps

A curb ramp is the accessible link between the parking lot level and the walk that leads to the accessible entrance. Noncompliant curb ramps can be hazardous and a liability for the property owner. So, it is important to get it right.

A curb ramp is at minimum 4 feet wide and is set at a mild slope to make it easier for individuals who use wheelchairs to travel from the accessible parking spaces to the building entrance. Without a curb ramp, there would be no way for people with disabilities who use wheelchairs to access the walk.

While there are many detailed requirements in the CBC for curb ramps, the most important element is:

1. **Slope of curb ramp:** The maximum allowed slope of a curb ramp is 1:12, or 8.33%. Slopes that are greater than 1:12 or 8.33% are extremely difficult to maneuver in a wheelchair. The final slope is usually verified by the building inspector and possibly the owner's architect or CASp using a 2-foot-long digital level.

Curb ramps have additional specific requirements for the slope of flared sides and landings, and also have a requirement to provide detectable warnings, which are the yellow bumpy surfaces at the edge of a curb ramp. Detectable warnings are provided for the blind or individuals with visual impairments to warn them that they are entering a vehicular area or street.

For detailed information on the various types of curb ramps, see CBC 11B-406.

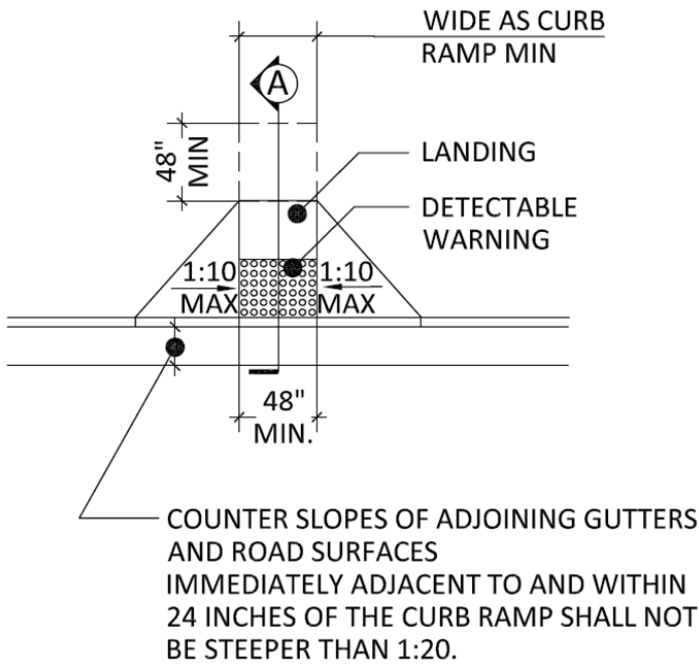
For detailed information on detectable warnings, see CBC 11B-705.

Curb Ramp Design:

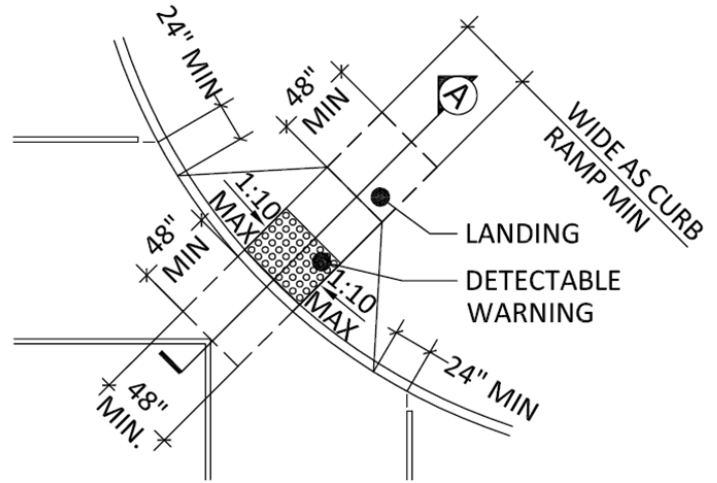
- If you are involved in the design of curb ramps, it is important to note that many local jurisdictions have their own requirements on types and designs for curb ramps within their right of way. Make sure you consult the CBC as well as the AHJ for all technical requirements that will be applicable to your project.



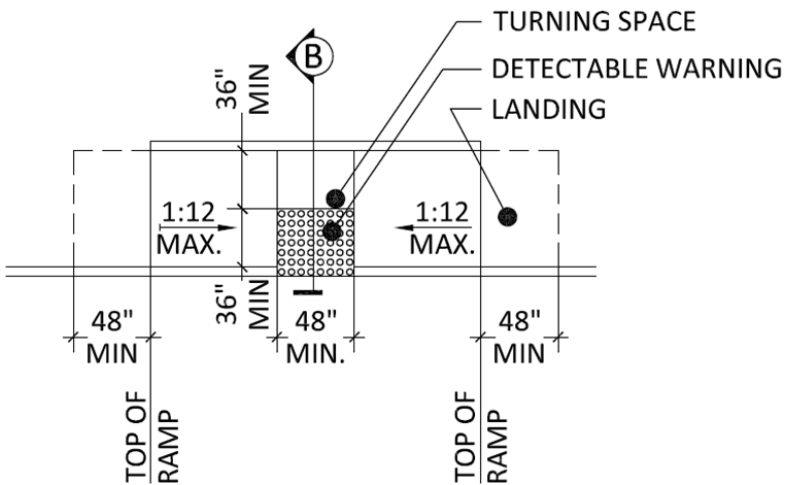
Curb Ramp Examples



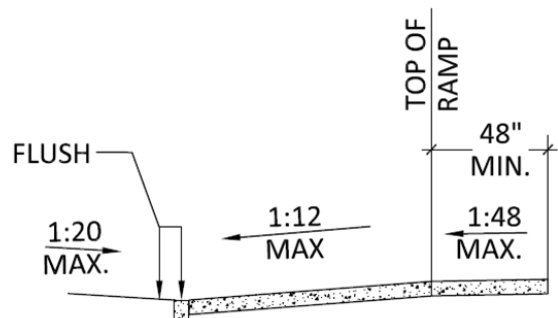
PERPENDICULAR CURB RAMP



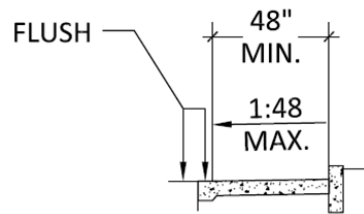
DIAGONAL OR CORNER TYPE CURB RAMP



PARALLEL CURB RAMP



SECTION A



SECTION B

Image credit: DGS staff

Detail is not to scale

Accessible Parking Spaces and Electric Vehicle Charging Stations

It is important to note that electric vehicle charging stations (EVCS) are not parking spaces. EVCS and parking are different services that are provided by a business or facility owner. Electric vehicle drivers do not need to charge every time they park, so EVCS are reserved specifically for charging under California law.

Where EVCS are provided in a facility available to the general public, EVCS accessible to persons with disabilities shall be provided in accordance with CBC Sections 11B-228.3 and 11B-812.

EVSC Installation

The EVCS (vehicle spaces and charging units) are required to be installed by contractors licensed in the state of California. The CSLB regulates contractors and issues licenses to conduct business as a contractor in a variety of construction trades. So, if this work is to be completed by a subcontractor, ensure they are compliant with the state's requirements.

Accessible Parking Spaces Near Outdoor Dining



Outdoor dining areas are often constructed in locations that were originally parking spaces. When outdoor dining spaces are provided in areas that were previously for parking, it is important that accessible parking spaces are not removed from service.

Please check with the local AHJ for further guidance.

For more information, please refer to CCDA's Open-Air Dining and Curbside Pickup Disability Access Considerations.⁶

⁶ “Open-Air Dining and Curbside Pickup Disability Access Considerations.” <https://www.dgs.ca.gov/CCDA>. Accessed November 15, 2022. <https://www.dgs.ca.gov/en/CCDA/Business-Connect>.

Purpose of this Guide

Why do our projects have to be accessible?

It's the law! Both state and federal law prohibit discrimination against any person based on disability who wishes to access the goods and services offered by a place of public accommodation. The contractor's role is critical in helping ensure disability access requirements are met in the construction and alteration of places of public accommodation.

It's the right thing to do! Protecting the civil rights of people with disabilities is of the utmost importance. Compliance with state and federal accessibility requirements is something disabled consumers should be able to count on as they go about their daily lives.

Avoid a lawsuit! A civil lawsuit may be filed against a business or facility owner for violations of construction-related accessibility standards, which deny accessibility to a business owner's goods and services. The business owner may file a claim against a contractor for the lack of compliance with construction-related accessibility standards. By ensuring compliance with the requirements of the CBC, contractors can reduce their liability.



Benefits of Compliance

Promote inclusion: One of the goals of the accessibility requirements is to ensure those with disabilities can take part in all aspects of life. When a person is denied access to a business, it is more than simply a violation of the law; it can cause difficulty, discomfort or embarrassment.

Promote awareness: The U.S. Census Bureau reports nearly 60 million Americans have a disability. The law requires that persons with disabilities be provided the same access to public accommodations that some others take for granted. A contractor's awareness of accessibility requirements and ability to construct a design properly will help to ensure access to public accommodations for all.

Go beyond the minimum: While the accessibility standards are based on minimum guidelines, contractors who also provide the design for the improvements may opt to adopt best practices to exceed those requirements. Doing this will reduce the risk of civil liability for failing to comply with the requirements. Meeting or exceeding accessibility standards should be factored into the cost of doing business rather than seen as an additional expense.



Definitions

Access aisle: An accessible space adjacent to or between vehicle spaces that provides compliance with the CBC.

Accessible parking identification: Pavement markings and signs provided to reserve accessible parking spaces in compliance with CBC 11B-502.6.

Accessible parking space: A reserved parking space that meets requirements of the California Building Code. For dimensions, markings, and identification sign requirements, see CBC section 11B-502.

Accessible route: A continuous, unobstructed path connecting accessible elements and spaces of an accessible site, building or facility that can be negotiated by a person with a disability using a wheelchair, and that is also safe for and usable by persons with other disabilities. Interior accessible routes may include corridors, hallways, floors, ramps, elevators and lifts. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps and lifts.

Adjusted construction cost: All costs directly related to the construction of the project, including labor, material, equipment, services, utilities, contractor financing, contractor overhead and profit, and construction management costs. The costs shall not be reduced by the value of components, assemblies, building equipment or construction not directly associated with accessibility or usability. The adjusted construction cost shall not include: project management fees and expenses, architecture and engineering fees, testing and inspection fees, and utility connection or service district fees.

Detectable warning: A standardized surface feature built in or applied to walking surfaces or other elements to warn persons with visual impairments of hazards on the circulation path.



International Symbol of Accessibility (ISA): Consists of a white figure in a wheelchair on a blue background and is used to indicate that buildings and facilities are designed in a manner to be usable by persons with disabilities.

Parking facility: A parking facility is a designated parking lot or structure serving a building. Parking lots and parking structures are considered to be separate parking facilities.

Path of travel: An identifiable accessible route within an existing site, building or facility by means of which a particular area may be approached, entered and exited, and which connects a particular area with an exterior approach (including sidewalks, streets and parking areas), an entrance to the facility, and other parts of the facility. When alterations, structural repairs or additions are made to existing buildings or facilities, the term “path of travel” also includes the toilet and bathing facilities, telephones, drinking fountains and signs serving the area of work.

Site arrival points: Locations from where individuals arrive at a site, including parking areas, public transportation stops, passenger loading zones and public streets or sidewalks.

Unauthorized parking sign: A sign located in a conspicuous place at each entrance to an off-street parking facility or immediately adjacent to on-site accessible parking and visible from each parking space. Specific language for the sign is in the California Building Code 11B-502.8, and shall display the address where a towed car can be retrieved and telephone number to reach the facility where the towed vehicle is located.

Vehicular Way: A route intended for vehicular traffic, such as a street, driveway or parking lot. For additional definitions, please refer to the California Building Code.⁷

⁷ International Code Council (ICC). 2022 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, VOLUMES 1, Chapter 11B. Accessed March 3, 2024. <http://codes.iccsafe.org/content/CABC2022P1/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing>.

Resources

The information outlined in this publication is based on California standards. Federal standards, which may be less restrictive, can be found at the ADA National Network (<https://adata.org/>).

For information on California's building codes and standards, contact the California Building Standards Commission (BSC) (<https://www.dgs.ca.gov/BSC>).

For information on access programs, refer to the California Capital Access Program (CalCAP) (<https://www.treasurer.ca.gov/cpcf/calcap/ada/faq-ada.asp>).

For information on California's accessibility laws and guidance, contact the California Commission on Disability Access (CCDA) (<https://www.dgs.ca.gov/CCDA>).

For information on California's accessibility laws and guidance, contact the California Department of Rehabilitation (DOR) (<https://www.dor.ca.gov>).

For information on California's accessibility laws, compliance advice or interpretations on accessibility requirements, contact the California Division of the State Architect (DSA) (<https://www.dgs.ca.gov/en/DSA>).

For information on local programs, refer to the California Foundation for Independent Living Centers (CFILC) (<https://www.cfilc.org/>).

To access CASI, refer to the Certified Access Specialist Institute (CASI) (<https://www.casinstitute.org>).

For licensing a contractor, refer to the Department of Consumer Affairs Contractors State License Board (CSLB) (<https://www.cslb.ca.gov>).

The information outlined in this publication is based on California standards. Information on federal standards can be found at United States Department of Justice (DOJ) — Civil Rights Division Disability Rights Section (<https://www.ada.gov>).

The information outlined in this publication is based on California standards. To access the California Building Code (2022), refer to <http://codes.iccsafe.org/content/CABC2022P1/chapter-11b-accessibility-to-public-buildings-public-accommodations-commercial-buildings-and-public-housing>.

For information on local programs and trainings, refer to the Pacific ADA Center (<https://www.adapacific.org/>).

The information outlined in this publication is based on California standards. For information on federal standards, refer to the United States Access Board (<https://www.access-board.gov/>).

Credits

CCDA Checklist Committee — Accessible Parking Campaign ADA Coordinators & Business Owners and Operators Work Group

Drake Dillard — CCDA Commissioner; Senior Project Manager, Perkins and Will

Brandon Estes — Analyst, California Building Standards Commission (BSC)

Shannon M. Mulhall, CASp — Senior HR Analyst, City of Fresno; Special Programs Chair, Certified Access Specialist Institute (CASI)

Mehdi Shadyab, CASp — Structural Engineer, City of San Diego

Bill Zellmer, CASp — Program Manager, Physical Access and Regulatory Affairs, Sutter Health

Ike Nnaji, CASp — President, Disability Access Specialists

CCDA Checklist Committee — Accessible Parking Campaign Construction Industry Work Group

Chris Barkley — Vice President and Director of Field Operations, Teichert Construction

Robert Chrisp — Owner, Chrisp Company

Roberto Cortez — President and CEO, Monarch Engineers

Brian Holloway — CCDA Commissioner; President, Holloway Land Development

John James, CASp — Building Official

Michael Jamnetski — Chief Deputy Registrar, Contractors State License Board (CSLB)

Craig Perry — Managing Partner, Point Source Construction Management

Katherine White — Chief of Public Affairs, CSLB

CCDA Commission Members

Chris Downey – Chair

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Anthony Seferian – Deputy Attorney General

Brian Maienschein – Assembly Member

Janet Nguyen – Assembly Member

Melissa Hurtado – Senator

Brian Jones – Senator

April Marie Dawson – CCDA Executive Director

Phil McPhaul – CCDA Operations Manager

Abigail Ridge – CCDA Staff

Department of Consumer Affairs (DCA) Contractors State License Board (CSLB)

Department of General Services (DGS) Real Estate Services Division (RESD)

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**400 R Street, Suite 310
Sacramento, CA 95811
Phone: (916) 319-9974
E-mail: CCDA@dgs.ca.gov
eFax: (916) 376-4216
Website: <https://www.dgs.ca.gov/CCDA>**