

FEDERAL RESOURCES

AND EXCERPTS FROM THE

2016 CALIFORNIA BUILDING CODE

RELATED TO

**New Accessibility Regulations for
Electric Vehicle Charging Stations**

at

**Public Buildings, Public Accommodations,
Commercial Buildings and Public Housing**

FEDERAL RESOURCES

Americans with Disabilities Act (ADA) Title II – State and Local Government

Title II covers all activities of State and local governments regardless of the government entity's size or receipt of Federal funding. Title II requires that State and local governments give people with disabilities an equal opportunity to benefit from all of their programs, services, and activities (e.g. public education, employment, transportation, recreation, health care, social services, courts, voting, and town meetings).

ADA Title III – Public Accommodations

Title III covers businesses and nonprofit service providers that are public accommodations, privately operated entities offering certain types of courses and examinations, privately operated transportation, and commercial facilities. Public accommodations are private entities who own, lease, lease to, or operate facilities such as restaurants, retail stores, hotels, movie theaters, private schools, convention centers, doctors' offices, homeless shelters, transportation depots, zoos, funeral homes, day care centers, and recreation facilities including sports stadiums and fitness clubs. Transportation services provided by private entities are also covered by title III.

Public accommodations must comply with basic nondiscrimination requirements that prohibit exclusion, segregation, and unequal treatment. They also must comply with specific requirements related to architectural standards for new and altered buildings...

Federal Standards:

- 2010 ADA Standards for Accessible Design, Section 228
- ABA Standards for Accessible Design (GSA, DOD, USPS), Section F228
- Uniform Federal Accessibility Standards (HUD)

Fortyone v. City of Lomita, United States Court of Appeals, Ninth Circuit

Opinion - Paez, Circuit Judge: In this case, we must decide whether Title II of the Americans with Disabilities Act ("ADA") requires local governments to provide accessible on-street parking in the absence of regulatory design specifications for on-street parking facilities. We hold that it does.

Conclusion - The text of the ADA, the relevant implementing regulations, and the DOJ's interpretation of its own regulations all lead us to conclude that public entities must ensure that all normal governmental functions are reasonably accessible to disabled persons, irrespective of whether the DOJ has adopted technical specifications for the particular types of facilities involved. Accordingly, we hold that Fortyone has stated claims under the ADA and the CDPA14 based on the City's alleged failure to provide accessible onstreet diagonal stall parking.

FEDERAL RESOURCES

<https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/guide-to-the-ada-standards/chapter-5-parking>

Electric Vehicle Charging Stations

The Standards do not include specific provisions for electric vehicle (EV) charging stations. However, it is advisable to address access to EV charging stations so that they are usable by people with disabilities. If provided, accessible spaces at EV charging stations cannot count toward the minimum number of accessible car and van parking spaces required in a parking facility.

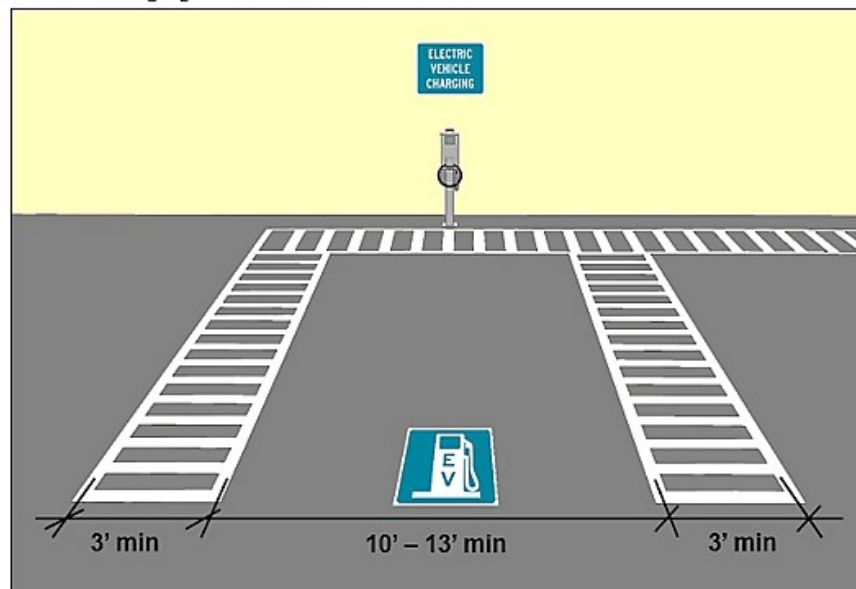


Recommendations: Provide access to a reasonable number of spaces serving EV charging stations or use the scoping table in §208.2 to determine an appropriate number. (The number of accessible spaces serving EV charging stations must be determined separately from the required number of car and van parking spaces.)

Accessible EV Charging Stations

Accessible Route

Provide an accessible route on both sides of the vehicle space that connects to the charging station for easier access.



Vehicle Space

A vehicle space at least 10' – 13' wide is advisable. A 10' width offers an extra 2' that effectively provides a 5' aisle on one side when paired with the accessible route; a 13' wide space will allow an 8' aisle. This flexibility is helpful since the parking direction is determined by the location of the charging station and the vehicle connection. Use the International Symbol of Accessibility only where spaces are reserved exclusively for people with disabilities.

2016 CALIFORNIA BUILDING CODE, CHAPTER 2 – DEFINITIONS

DRIVE-UP ELECTRIC VEHICLE CHARGING STATION. An electric vehicle charging station in which use is limited to 30 minutes maximum and is provided at a location where the electric vehicle approaches in the forward direction, stops in the vehicle space, charges the vehicle, and proceeds forward to depart the vehicle space. The arrangement of a drive-up electric vehicle charger and its associated vehicle space is similar to a gasoline filling station island.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For the purpose of this code, offroad, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE (EV) CHARGER. Off-board charging equipment used to charge an electric vehicle.

ELECTRIC VEHICLE CHARGING SPACE (EV Space). A space intended for charging electric vehicles.

ELECTRIC VEHICLE CHARGING STATION (EVCS). One or more electric vehicle charging spaces served by an electric vehicle charger or other charging equipment. Where a multiport electric vehicle charger can simultaneously charge more than one vehicle, the number of electric vehicle charging stations shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.

ELECTRIC VEHICLE (EV) CONNECTOR. A device that, when electrically coupled (conductive or inductive) to an electric vehicle inlet, establishes an electrical connection to the electric vehicle for the purpose of power transfer and information exchange. This device is part of the electric vehicle coupler.

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.

DIVISION 2: SCOPING REQUIREMENTS

11B-201 Application

11B-201.1 Scope. All areas of newly designed and newly constructed buildings and facilities and altered portions of existing buildings and facilities shall comply with these requirements.

11B-201.2 Application based on building or facility use. Where a site, building, facility, room, or space contains more than one use, each portion shall comply with the applicable requirements for that use.

11B-201.3 Temporary and permanent structures. These requirements shall apply to temporary and permanent buildings and facilities.

11B-201.4 Construction support facilities. *These requirements shall apply to temporary or permanent construction support facilities for uses and activities not directly associated with the actual processes of construction, including but not limited to offices, meeting rooms, plan rooms, other administrative or support functions. When provided, toilet and bathing facilities serving construction support facilities shall comply with Section 11B-213. When toilet and bathing facilities serving construction support facilities are provided by portable units, at least one of each type shall be accessible and connected to the construction support facilities it serves by an accessible route.*

Exception: *During construction an accessible route shall not be required between site arrival points or the boundary of the area of construction and the entrance to the construction support facilities if the only means of access between them is a vehicular way not providing pedestrian access.*

11B-202 Existing buildings and facilities

11B-202.1 General. Additions and alterations to existing buildings or facilities shall comply with Section 11B-202.

11B-202.2 Additions. Each addition to an existing building or facility shall comply with the requirements for new construction and shall comply with Section 11B-202.4.

11B-202.3 Alterations. Where existing elements or spaces are altered, each altered element or space shall comply with the applicable requirements of Division 2, including Section 11B-202.4.

Exceptions:

1. **Reserved.**
2. **Technically infeasible.** In alterations, where the enforcing authority determines compliance with applicable requirements is technically infeasible, the alteration shall provide equivalent facilitation or comply with the requirements to the maximum extent feasible. *The details of the finding that full compliance with the requirements is technically infeasible shall be recorded and entered into the files of the enforcing agency.*

3. Residential dwelling units not required to be accessible in compliance with *this code* shall not be required to comply with Section 11B-202.3.

11B-202.3.1 Prohibited reduction in access. An alteration that decreases or has the effect of decreasing the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.

11B-202.3.2 Extent of application. An alteration of an existing element, space, or area of a building or facility shall not impose a requirement for accessibility greater than required for new construction.

11B-202.3.3 Alteration of single elements. *If alterations of single elements, when considered together, amount to an alteration of a room or space in a building or facility, the entire room or space shall be made accessible.*

11B-202.4 Path of travel requirements in alterations, additions and structural repairs. *When alterations or additions are made to existing buildings or facilities, an accessible path of travel to the specific area of alteration or addition shall be provided. The primary accessible path of travel shall include:*

1. A primary entrance to the building or facility,
2. Toilet and bathing facilities serving the area,
3. Drinking fountains serving the area,
4. Public telephones serving the area, and
5. Signs.

Exceptions:

1. Residential dwelling units shall comply with Section 11B-233.3.4.2.
2. *If the following elements of a path of travel have been constructed or altered in compliance with the accessibility requirements of the immediately preceding edition of the California Building Code, it shall not be required to retrofit such elements to reflect the incremental changes in this code solely because of an alteration to an area served by those elements of the path of travel:*
 1. A primary entrance to the building or facility,
 2. Toilet and bathing facilities serving the area,
 3. Drinking fountains serving the area,
 4. Public telephones serving the area, and
 5. Signs.
3. *Additions or alterations to meet accessibility requirements consisting of one or more of the following items shall be limited to the actual scope of work of the project and shall not be required to comply with Section 11B-202.4:*
 1. Altering one building entrance.
 2. Altering one existing toilet facility.

in determining whether the cost of making that path of travel accessible is disproportionate.

9. Certain types of privately funded, multistory buildings and facilities were formerly exempt from accessibility requirements above and below the first floor under this code, but as of April 1, 1994 are no longer exempt due to more restrictive provisions in the federal Americans with Disabilities Act. In alteration projects involving buildings and facilities previously approved and built without elevators, areas above and below the ground floor are subject to the 20-percent disproportionality provisions described in Exception 8, above, even if the value of the project exceeds the valuation threshold in Exception 8. The types of buildings and facilities are:

1. Office buildings and passenger vehicle service stations of three stories or more and 3,000 or more square feet (279 m²) per floor.
2. Offices of physicians and surgeons.
3. Shopping centers.
4. Other buildings and facilities three stories or more and 3,000 or more square feet (279 m²) per floor if a reasonable portion of services sought and used by the public is available on the accessible level.

For the general privately funded multistory building exception applicable to new construction and alterations, see Section 11B-206.2.3, Exception 1.

The elevator exception set forth in this section does not obviate or limit in any way the obligation to comply with the other accessibility requirements in this code. For example, floors above or below the accessible ground floor must meet the requirements of this section except for elevator service. If toilet or bathing facilities are provided on a level not served by an elevator, then toilet or bathing facilities must be provided on the accessible ground floor.

10. Alterations solely for the purpose of installing electric vehicle charging stations (EVCS) at facilities where vehicle fueling, recharging, parking or storage is a primary function shall comply with Section 11B-202.4 to the maximum extent feasible without exceeding 20 percent of the cost of the work directly associated with the installation of EVCS.

Alterations solely for the purpose of installing EVCS at facilities where vehicle fueling, recharging, parking or storage is not a primary function shall not be required to comply with Section 11B-202.4

11B-202.5 Alterations to qualified historic buildings and facilities. Alterations to a qualified historic building or facility shall comply with the State Historical Building Code, Part 8, Title 24, of the California Code of Regulations.

Exception: Reserved.

11B-203 General exceptions

11B-203.1 General. Sites, buildings, facilities, and elements are exempt from these requirements to the extent specified by 11B-203.

11B-203.2 Construction sites. Structures and sites directly associated with the actual processes of construction, including but not limited to, scaffolding, bridging, materials hoists, materials storage and construction trailers shall not be required to comply with these requirements or to be on an accessible route. Portable toilet units provided for use exclusively by construction personnel on a construction site shall not be required to comply with Section 11B-213 or to be on an accessible route.

11B-203.3 Raised areas. Areas raised primarily for purposes of security, life safety, or fire safety, including but not limited to, observation or lookout galleries, prison guard towers, fire towers or life guard stands shall not be required to comply with these requirements or to be on an accessible route.

11B-203.4 Limited access spaces. Spaces not customarily occupied and accessed only by ladders, catwalks, crawl spaces or very narrow passageways shall not be required to comply with these requirements or to be on an accessible route.

11B-203.5 Machinery spaces. Spaces frequented only by service personnel for maintenance, repair or occasional monitoring of equipment shall not be required to comply with these requirements or to be on an accessible route. Machinery spaces include, but are not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; water or sewage treatment pump rooms and stations; electric substations and transformer vaults; and highway and tunnel utility facilities.

11B-203.6 Single occupant structures. Single occupant structures accessed only by passageways below grade or elevated above standard curb height, including but not limited to, toll booths that are accessed only by underground tunnels, shall not be required to comply with these requirements or to be on an accessible route.

11B-203.7 Detention and correctional facilities. In detention and correctional facilities, common use areas that are used only by inmates or detainees and security personnel and that do not serve holding cells or housing cells required to comply with Section 11B-232, shall not be required to comply with these requirements or to be on an accessible route.

11B-203.8 Residential facilities. In public housing residential facilities, common use areas that do not serve residential dwelling units required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4 and adaptable features complying with Chapter 11A, Division IV shall not be required to comply with these requirements or to be on an accessible route.

11B-203.9 Employee workstations. Employee workstations shall be on an accessible route complying with Division 4. Spaces and elements within employee workstations shall only be required to comply with Sections 11B-207.1, 11B-215.3,

11B-207.1 General. Means of egress shall comply with Chapter 10, Section 1009.

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.

11B-207.2 Platform lifts. Standby power shall be provided for platform lifts permitted by Chapter 10, Section 1009.5 to serve as a part of an accessible means of egress. *To ensure continued operation in case of primary power loss, platform lifts shall be provided with standby power or with self-rechargeable battery power that provides sufficient power to operate all platform lift functions for a minimum of five upward and downward trips.*

11B-208 Parking spaces

11B-208.1 General. Where parking spaces are provided, parking spaces shall be provided in accordance with Section 11B-208. For the purposes of this section, electric vehicle charging stations are not parking spaces; see Section 11B-228.

Exception: Parking spaces used exclusively for buses, trucks, other delivery vehicles, or vehicular impound shall not be required to comply with Section 11B-208 provided that lots accessed by the public are provided with a passenger loading zone complying with Section 11B-503.

11B-208.2 Minimum number. Parking spaces complying with Section 11B-502 shall be provided in accordance with Table 11B-208.2 except as required by Sections 11B-208.2.1, 11B-208.2.2, and 11B-208.2.3. Where more than one parking facility is provided on a site, the number of accessible spaces provided on the site shall be calculated according to the number of spaces required for each parking facility.

11B-208.2.1 Hospital outpatient facilities. Ten percent of patient and visitor parking spaces provided to serve hospital outpatient facilities, and free-standing buildings providing outpatient clinical services of a hospital, shall comply with Section 11B-502.

viding outpatient clinical services of a hospital, shall comply with Section 11B-502.

11B-208.2.2 Rehabilitation facilities and outpatient physical therapy facilities. Twenty percent of patient and visitor parking spaces provided to serve rehabilitation facilities specializing in treating conditions that affect mobility and outpatient physical therapy facilities shall comply with Section 11B-502.

11B-208.2.3 Residential facilities. Parking spaces provided to serve residential facilities shall comply with Section 11B-208.2.3.

11B-208.2.3.1 Parking for residents. Where at least one parking space is provided for each residential dwelling unit, at least one parking space complying with Section 11B-502 shall be provided for each residential dwelling unit required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4. Where fewer than one parking space is provided for each residential dwelling unit, parking spaces complying with Section 11B-502 shall be provided in accordance with Table 11B-208.2.

11B-208.2.3.2 Additional parking spaces for residents. Where the total number of parking spaces provided for each residential dwelling unit exceeds one parking space per residential dwelling unit, 2 percent, but no fewer than one space, of all the parking spaces not covered by Section 11B-208.2.3.1 shall comply with Section 11B-502.

11B-208.2.3.3 Parking for guests, employees, and other non-residents. Where parking spaces are provided for persons other than residents, parking shall be provided in accordance with Table 11B-208.2.

Note: When assigned parking is provided, Chapter 11A indicates designated accessible parking for the adaptable residential dwelling units shall be provided on requests of residents with disabilities on the same terms and with the full range of choices (e.g., off-street parking, carport or garage) that are available to other residents.

**TABLE 11B-208.2
PARKING SPACES**

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2 percent of total
1001 and over	20, plus 1 for each 100, or fraction thereof, over 1000

**TABLE 11B-225.3
SELF-SERVICE STORAGE FACILITIES**

TOTAL SPACES IN FACILITY	MINIMUM NUMBER OF SPACES REQUIRED TO BE ACCESSIBLE
1 to 200	5 percent, but no fewer than 1
201 and over	10, plus 2 percent of total number of units over 200

11B-225.3.1 Dispersion. Individual self-service storage spaces shall be dispersed throughout the various classes of spaces provided. Where more classes of spaces are provided than the number required to be accessible, the number of spaces shall not be required to exceed that required by Table 11B-225.3. Self-service storage spaces complying with Table 11B-225.3 shall not be required to be dispersed among buildings in a multi-building facility.

11B-226 Dining surfaces and work surfaces

11B-226.1 General. Where dining surfaces are provided for the consumption of food or drink, at least 5 percent of the seating spaces and standing spaces at the dining surfaces shall comply with Section 11B-902. In addition, where work surfaces are provided for use by other than employees, at least 5 percent shall comply with Section 11B-902.

Exceptions:

1. Sales counters and service counters shall not be required to comply with Section 11B-902. See Section 11B-227.
2. Check writing surfaces provided at check-out aisles not required to comply with Section 11B-904.3 shall not be required to comply with Section 11B-902.

11B-226.2 Dispersion. Dining surfaces required to comply with Section 11B-902 shall be dispersed throughout the space or facility containing dining surfaces for each type of seating in a functional area. Work surfaces required to comply with Section 11B-902 shall be dispersed throughout the space or facility containing work surfaces.

11B-226.3 Dining surfaces exceeding 34 inches in height. Where food or drink is served for consumption at a counter exceeding 34 inches (864 mm) in height, a portion of the main counter 60 inches (1525 mm) minimum in length shall be provided in compliance with Section 11B-902.3.

11B-226.4 Baby changing tables. Baby changing tables shall comply with Sections 11B-309 and 11B-902. Baby changing tables when deployed shall not obstruct the required width of an accessible route except as allowed by Section 11B-307.2. Baby changing tables shall not be located in toilet compartments complying with Section 11B-604.8 within a multiple accommodation toilet facility.

11B-227 Sales and service

11B-227.1 General. Where provided, check-out aisles, sales counters, service counters, food service lines, queues, and waiting lines shall comply with Sections 11B-227 and 11B-904.

11B-227.2 Check-out aisles. Where check-out aisles are provided, check-out aisles complying with Section 11B-904.3 shall be provided in accordance with Table 11B-227.2. Where check-out aisles serve different functions, check-out aisles complying with Section 11B-904.3 shall be provided in accordance with Table 11B-227.2 for each function. Where check-out aisles are dispersed throughout the building or facility, check-out aisles complying with Section 11B-904.3 shall be dispersed. When not all check-out aisles are accessible, accessible check-out aisles shall be identified by a sign complying with Section 11B-904.3.4.

Note: Operational procedures are often necessary to ensure the Americans with Disabilities Act accessibility requirements are met. When check-out aisles are open for customer use, the business should ensure that a minimum of one accessible check-out aisle is always available for use by persons with disabilities. As check-out aisles are opened and closed based on fluctuating customer levels, the business should ensure that the number of accessible check-out aisles available complies with Table 11B-227.2.

Exception: In existing buildings, where the selling space is under 5000 square feet (465 m²) no more than one check-out aisle complying with Section 11B-904.3 shall be required.

**TABLE 11B-227.2
CHECK-OUT AISLES**

NUMBER OF CHECK-OUT AISLES OF EACH FUNCTION	MINIMUM NUMBER OF CHECK-OUT AISLES OF EACH FUNCTION REQUIRED TO COMPLY WITH 11B-904.3
1 to 4	1
5 to 8	2
9 to 15	3
16 and over	3, plus 20 percent of additional aisles

11B-227.2.1 Altered check-out aisles. Where check-out aisles are altered, at least one of each check-out aisle serving each function shall comply with Section 11B-904.3 until the number of check-out aisles complies with Section 11B-227.2.

11B-227.3 Counters. Where provided, at least one of each type of sales counter and service counter shall comply with Section 11B-904.4. Where counters are dispersed throughout the building or facility, counters complying with Section 11B-904.4 also shall be dispersed.

11B-227.4 Food service lines. Food service lines shall comply with Section 11B-904.5. Where self-service shelves are provided, at least 50 percent, but no fewer than one, of each type provided shall comply with Section 11B-308.

11B-227.5 Queues and waiting lines. Queues and waiting lines servicing counters or check-out aisles required to comply with Sections 11B-904.3 or 11B-904.4 shall comply with Section 11B-403.

11B-228 Depositories, vending machines, change machines, mail boxes, fuel dispensers, and electric vehicle charging stations.

11B-228.1 General. Where provided, at least one of each type of depository, vending machine, change machine, and fuel dispenser shall comply with Section 11B-309. Electric vehicle charging stations shall comply with Section 11B-228.3.

Exception: Drive-up only depositories shall not be required to comply with Section 11B-309.

11B-228.2 Mail boxes. Where mail boxes are provided in an interior location, at least 5 percent, but no fewer than one, of each type shall comply with Section 11B-309. In residential facilities, where mail boxes are provided for each residential dwelling unit, mail boxes complying with Section 11B-309 shall be provided for each residential dwelling unit required to provide mobility features complying with Sections 11B-809.2 through 11B-809.4 and adaptable features complying with Chapter 11A, Division IV.

11B-228.3 Electric vehicle charging stations

11B-228.3.1 General. Where electric vehicle charging stations (EVCS) are provided, EVCS shall be provided in accordance with Section 11B-228.3.

11B-228.3.1.1 Existing facilities. Where new EVCS are added to a facility with existing EVCS, the requirements of Section 11B-812 shall apply only to the new EVCS installed. Alterations to existing EVCS shall comply with Section 11B-228.3.

11B-228.3.1.2 Operable parts. Where EV chargers are provided, operable parts on all EV chargers shall comply with Section 11B-309.4.

11B-228.3.2 Minimum number. EVCS complying with Section 11B-812 shall be provided in accordance with Section 11B-228.3.2. Where EVCS are provided in more than one facility on a site, the number of EVCS complying with Section 11B-228.3.2 provided on the site shall be calculated according to the number required for each facility. Where an EV charger can simultaneously charge more than one vehicle, the number of EV chargers provided shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.

Exceptions:

1. EVCS not available to the general public and intended for use by a designated vehicle or driver shall not be required to comply with Sec-

tion 11B-228.3.2. Examples include, but are not limited to, EVCS serving public or private fleet vehicles and EVCS assigned to an employee.

2. In public housing facilities, EVCS intended for use by an EV owner or operator at their residence shall not be required to comply with Section 11B-228.3.2.

11B-228.3.2.1 Public use or common use EVCS. Where EVCS are provided for public use or common use, EVCS complying with Section 11B-812 shall be provided in accordance with Table 11B-228.3.2.1. Where new EVCS are installed in facilities with existing EVCS, the “Total Number of EVCS at a Facility” in Table 11B-228.3.2.1 shall include both existing and new EVCS.

Exception: All drive-up EVCS shall comply with Section 11B-812.

11B-229 Windows

11B-229.1 General. Where glazed openings are provided in accessible rooms or spaces for operation by occupants, at least one opening shall comply with Section 11B-309. Each glazed opening required by an administrative authority to be operable shall comply with Section 11B-309.

Exception:

1. Glazed openings in residential dwelling units required to comply with Section 11B-809 shall not be required to comply with Section 11B-229.
2. Glazed openings in guest rooms required to provide communication features and in guest rooms required to comply with Section 11B-206.5.3 shall not be required to comply with Section 11B-229.

11B-230 Two-way communication systems

11B-230.1 General. Where a two-way communication system is provided to gain admittance to a building or facility or to restricted areas within a building or facility, the system shall comply with Section 11B-708.

11B-231 Judicial facilities

11B-231.1 General. Judicial facilities shall comply with Section 11B-231.

**TABLE 11B-228.3.2.1
ELECTRIC VEHICLE CHARGING STATIONS FOR PUBLIC USE AND COMMON USE**

TOTAL NUMBER OF EVCS AT A FACILITY ¹	MINIMUM NUMBER (by type) OF EVCS REQUIRED TO COMPLY WITH SECTION 11B-812 ¹		
	Van Accessible	Standard Accessible	Ambulatory
1 to 4	1	0	0
5 to 25	1	1	0
26 to 50	1	1	1
51 to 75	1	2	2
76 to 100	1	3	3
101 and over	1, plus 1 for each 300, or fraction thereof, over 100	3, plus 1 for each 60, or fraction thereof, over 100	3, plus 1 for each 50, or fraction thereof, over 100

1. Where an EV charger can simultaneously charge more than one vehicle, the number of EVCS provided shall be considered equivalent to the number of electric vehicles that can be simultaneously charged.

DIVISION 3: BUILDING BLOCKS

11B-301 General

11B-301.1 Scope. The provisions of *Division 3* shall apply where required by *Division 2* or where referenced by a requirement in this *chapter*.

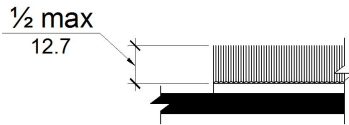
11B-302 Floor or ground surfaces

11B-302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with *Section 11B-302*.

Exceptions:

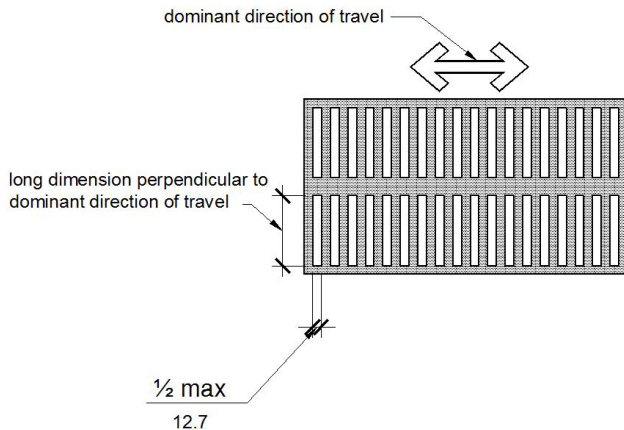
1. Within animal containment areas, floor and ground surfaces shall not be required to be stable, firm, and slip resistant.
2. Areas of sport activity shall not be required to comply with *Section 11B-302*.

11B-302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing or no cushion or pad. Carpet or carpet tile shall have a level loop, textured loop, level cut pile, level cut/uncut pile texture. Pile height shall be $\frac{1}{2}$ inch (12.7 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with *Section 11B-303*.



**FIGURE 11B-302.2
CARPET PILE HEIGHT**

11B-302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than $\frac{1}{2}$ inch (12.7 mm) diameter except as allowed in *Sections 11B-407.4.3, 11B-409.4.3, 11B-410.4, 11B-810.5.3 and 11B-810.10*. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.



**FIGURE 11B-302.3
ELONGATED OPENINGS IN FLOOR OR GROUND SURFACES**

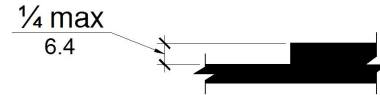
11B-303 Changes in level

11B-303.1 General. Where changes in level are permitted in floor or ground surfaces, they shall comply with *Section 11B-303*.

Exceptions:

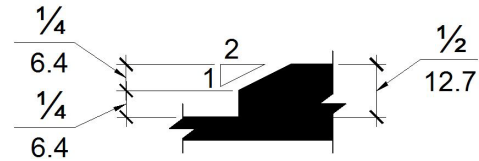
1. Animal containment areas shall not be required to comply with *Section 11B-303*.
2. Areas of sport activity shall not be required to comply with *Section 11B-303*.

11B-303.2 Vertical. Changes in level of $\frac{1}{4}$ inch (6.4 mm) high maximum shall be permitted to be vertical *and without edge treatment*.



**FIGURE 11B-303.2
VERTICAL CHANGE IN LEVEL**

11B-303.3 Beveled. Changes in level between $\frac{1}{4}$ inch (6.4 mm) high minimum and $\frac{1}{2}$ inch (12.7 mm) high maximum shall be beveled with a slope not steeper than 1:2.



**FIGURE 11B-303.3
BEVELED CHANGE IN LEVEL**

11B-303.4 Ramps. Changes in level greater than $\frac{1}{2}$ inch (12.7 mm) high shall be ramped, and shall comply with *Section 11B-405 or 11B-406*.

11B-303.5 Warning curbs. Abrupt changes in level exceeding 4 inches (102 mm) in a vertical dimension between walks, sidewalks or other pedestrian ways and adjacent surfaces or features shall be identified by warning curbs at least 6 inches (152 mm) in height above the walk or sidewalk surface.

Exceptions:

1. A warning curb is not required between a walk or sidewalk and an adjacent street or driveway.
2. A warning curb is not required when a guard or handrail is provided with a guide rail centered 2 inches (51 mm) minimum and 4 inches (102 mm) maximum above the surface of the walk or sidewalk.

11B-304 Turning space

11B-304.1 General. Turning space shall comply with *Section 11B-304*.

11B-304.2 Floor or ground surfaces. Floor or ground surfaces of a turning space shall comply with *Section 11B-302*. Changes in level are not permitted.

Exception: Slopes not steeper than 1:48 shall be permitted.

11B-304.3 Size. Turning space shall comply with *Section 11B-304.3.1* or *11B-304.3.2*.

11B-304.3.1 Circular space. The turning space shall be a space of 60 inches (1524 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with *Section 11B-306*.

11B-304.3.2 T-Shaped space. The turning space shall be a T-shaped space within a 60 inch (1524 mm) square minimum with arms and base 36 inches (914 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with *Section 11B-306* only at the end of either the base or one arm.

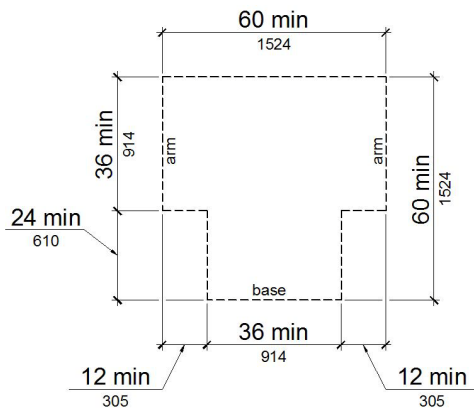


FIGURE 11B-304.3.2 T-SHAPED TURNING SPACE

11B-304.4 Door swing. Doors shall be permitted to swing into turning spaces.

11B-305 Clear floor or ground space

11B-305.1 General. Clear floor or ground space shall comply with *Section 11B-305*.

11B-305.2 Floor or ground surfaces. Floor or ground surfaces of a clear floor or ground space shall comply with *Section 11B-302*. Changes in level are not permitted.

Exception: Slopes not steeper than 1:48 shall be permitted.

11B-305.3 Size. The clear floor or ground space shall be 30 inches (762 mm) minimum by 48 inches (1219 mm) minimum.

11B-305.4 Knee and toe clearance. Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with *Section 11B-306*.

11B-305.5 Position. Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

11B-305.6 Approach. One full unobstructed side of the clear floor or ground space shall adjoin an accessible route or

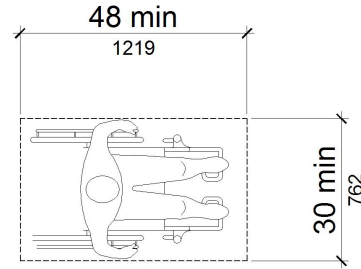


FIGURE 11B-305.3 CLEAR FLOOR OR GROUND SPACE

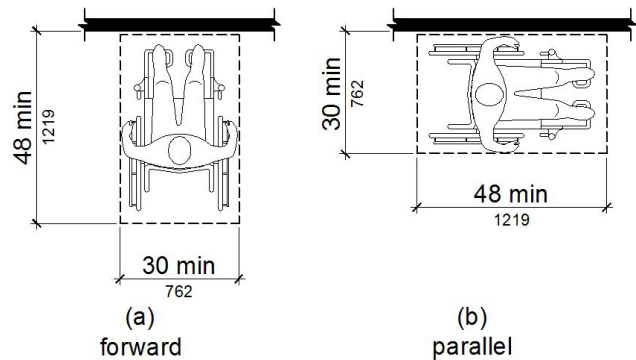


FIGURE 11B-305.5 POSITION OF CLEAR FLOOR OR GROUND SPACE

adjoin another clear floor or ground space. *Clear floor or ground space may overlap an accessible route, unless specifically prohibited elsewhere in this chapter.*

11B-305.7 Maneuvering clearance. Where a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearance shall be provided in accordance with *Sections 11B-305.7.1* and *11B-305.7.2*.

11B-305.7.1 Forward approach. Alcoves shall be 36 inches (914 mm) wide minimum where the depth exceeds 24 inches (610 mm).

11B-305.7.2 Parallel approach. Alcoves shall be 60 inches (1524 mm) wide minimum where the depth exceeds 15 inches (381 mm).

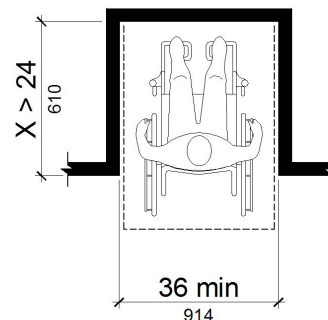


FIGURE 11B-305.7.1 MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH

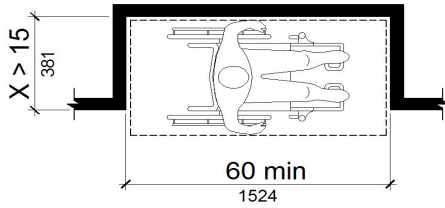


FIGURE 11B-305.7.2
MANEUVERING CLEARANCE IN
AN ALCOVE, PARALLEL APPROACH

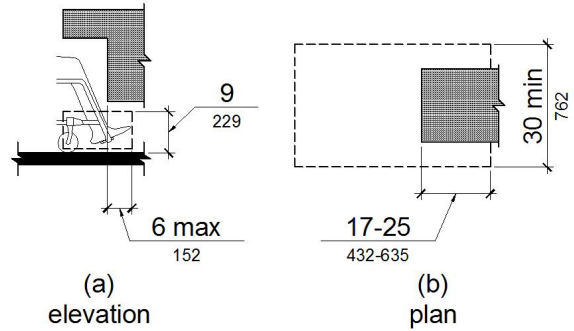


FIGURE 11B-306.2
TOE CLEARANCE

11B-306 Knee and toe clearance

11B-306.1 General. Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with *Section 11B-306*. Additional space shall not be prohibited beneath an element but shall not be considered as part of the clear floor or ground space or turning space.

11B-306.2 Toe clearance

11B-306.2.1 General. Space under an element between the finish floor or ground and 9 inches (229 mm) above the finish floor or ground shall be considered toe clearance and shall comply with *Section 11B-306.2*.

11B-306.2.2 Maximum depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

Exception: Toe clearance shall extend 19 inches (483 mm) maximum under lavatories required to be accessible by *Section 11B-213.3.4*.

11B-306.2.3 Minimum required depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (432 mm) minimum under the element.

Exceptions:

1. The toe clearance shall extend 19 inches (483 mm) minimum under sinks required to be accessible by *Section 11B-212.3*.
2. The toe clearance shall extend 19 inches (483 mm) minimum under built-in dining and work surfaces required to be accessible by *Section 11B-226.1*.

11B-306.2.4 Additional clearance. Space extending greater than 6 inches (152 mm) beyond the available knee clearance at 9 inches (229 mm) above the finish floor or ground shall not be considered toe clearance.

11B-306.2.5 Width. Toe clearance shall be 30 inches (762 mm) wide minimum.

11B-306.3 Knee clearance.

11B-306.3.1 General. Space under an element between 9 inches (229 mm) and 27 inches (686 mm) above the finish floor or ground shall be considered knee clearance and shall comply with *Section 11B-306.3*.

Exception: At lavatories required to be accessible by *Section 11B-213.3.4*, space between 9 inches (229 mm) and 29 inches (737 mm) above the finish floor or ground, shall be considered knee clearance.

11B-306.3.2 Maximum depth. Knee clearance shall extend 25 inches (635 mm) maximum under an element at 9 inches (229 mm) above the finish floor or ground.

11B-306.3.3 Minimum required depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (279 mm) deep minimum at 9 inches (229 mm) above the finish floor or ground, and 8 inches (203 mm) deep minimum at 27 inches (686 mm) above the finish floor or ground.

Exceptions:

1. At lavatories required to be accessible by *Section 11B-213.3.4*, the knee clearance shall be 27 inches (686 mm) high minimum above the finish floor or

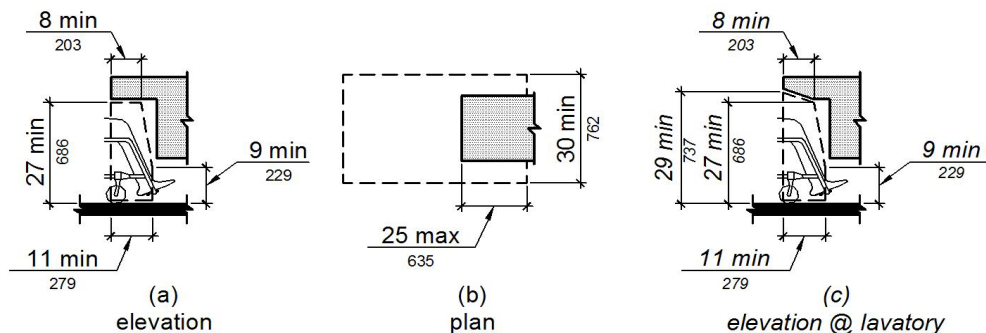


FIGURE 11B-306.3
KNEE CLEARANCE

ground at a depth of 8 inches (203 mm) minimum increasing to 29 inches (737 mm) high minimum above the finish floor or ground at the front edge of a counter with a built-in lavatory or at the front edge of a wall-mounted lavatory fixture.

- At dining and work surfaces required to be accessible by Section 11B-226.1, knee clearance shall extend 19 inches (483 mm) deep minimum at 27 inches (686 mm) above the finish floor or ground.

11B-306.3.4 Clearance reduction. Between 9 inches (229 mm) and 27 inches (686 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (152 mm) in height.

Exception: The knee clearance shall not be reduced at built-in dining and work surfaces required to be accessible by Section 11B-226.1.

11B-306.3.5 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

11B-307 Protruding objects

11B-307.1 General. Protruding objects shall comply with Section 11B-307.

11B-307.2 Protrusion limits. Objects with leading edges more than 27 inches (686 mm) and not more than 80 inches (2032 mm) above the finish floor or ground shall protrude 4 inches (102 mm) maximum horizontally into the circulation path.

Exception: Handrails shall be permitted to protrude 4½ inches (114 mm) maximum.

11B-307.3 Post-mounted objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (686 mm) minimum and 80 inches (2032 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (686 mm) maximum or 80 inches (2032 mm) minimum above the finish floor or ground.

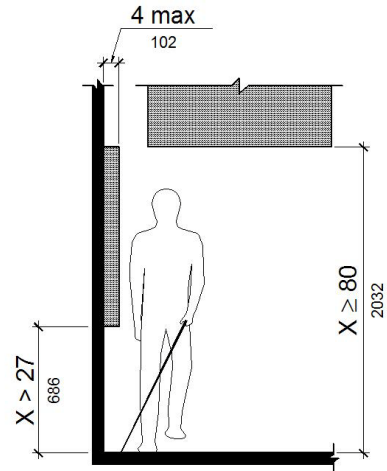


FIGURE 11B-307.2 LIMITS OF PROTRUDING OBJECTS

Exception: The sloping portions of handrails serving stairs and ramps shall not be required to comply with Section 11B-307.3.

11B-307.3.1 Edges and corners. Where signs or other objects are mounted on posts or pylons, and their bottom edges are less than 80 inches (2032 mm) above the floor or ground surface, the edges of such signs and objects shall be rounded or eased and the corners shall have a minimum radius of 1/8 inch (3.2 mm).

11B-307.4 Vertical clearance. Vertical clearance shall be 80 inches (2032 mm) high minimum. Guardrails or other barriers shall be provided where the vertical clearance is less than 80 inches (2032 mm) high. The leading edge of such guardrail or barrier shall be located 27 inches (686 mm) maximum above the finish floor or ground.

Exception: Door closers and door stops shall be permitted to be 78 inches (1981 mm) minimum above the finish floor or ground.

11B-307.4.1 Guy braces. Where a guy support is used within either the width of a circulation path or 24 inches (610 mm) maximum outside of a circulation path, a vertical guy brace, sidewalk guy or similar device shall be used to prevent a hazard or an overhead obstruction.

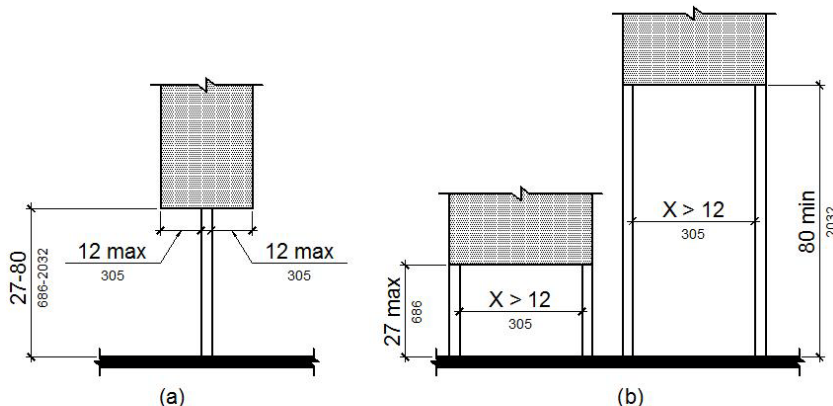


FIGURE 11B-307.3 POST-MOUNTED PROTRUDING OBJECTS

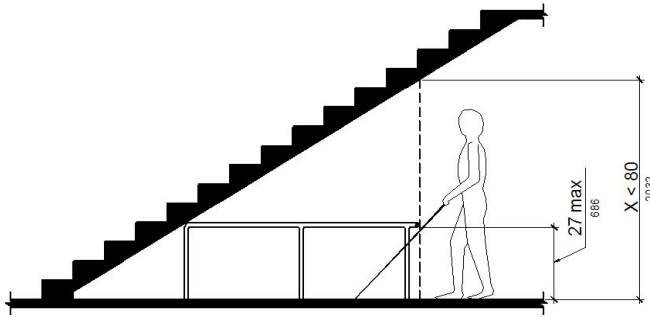


FIGURE 11B-307.4
VERTICAL CLEARANCE

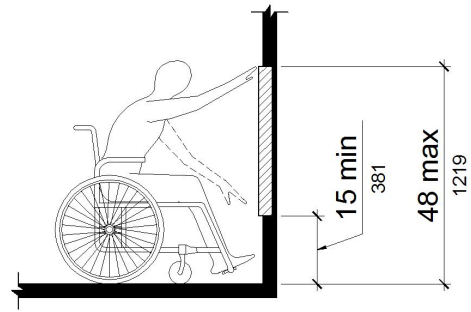


FIGURE 11B-308.2.1
UNOBSTRUCTED FORWARD REACH

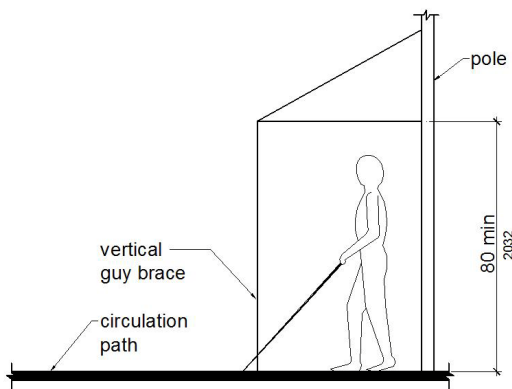


FIGURE 11B-307.4.1
GUY BRACES

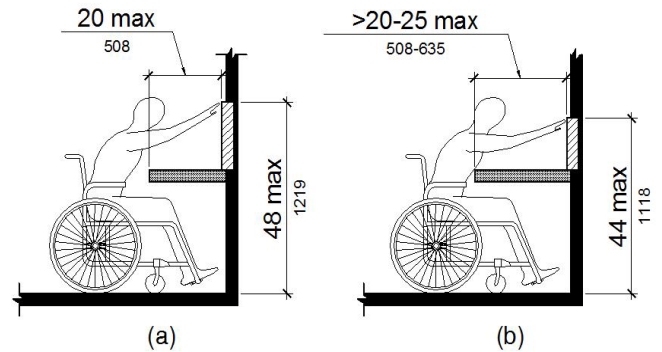


FIGURE 11B-308.2.2
OBSTRUCTED HIGH FORWARD REACH

11B-307.5 Required clear width. Protruding objects shall not reduce the clear width required for accessible routes.

11B-308 Reach ranges

11B-308.1 General. Reach ranges shall comply with Section 11B-308.

11B-308.1.1 Electrical switches. Controls and switches intended to be used by the occupant of a room or area to control lighting and receptacle outlets, appliances or cooling, heating and ventilating equipment, shall comply with Section 11B-308 except the low reach shall be measured to the bottom of the outlet box and the high reach shall be measured to the top of the outlet box.

11B-308.1.2 Electrical receptacle outlets. Electrical receptacle outlets on branch circuits of 30 amperes or less and communication system receptacles shall comply with Section 11B-308 except the low reach shall be measured to the bottom of the outlet box and the high reach shall be measured to the top of the outlet box.

11B-308.2 Forward reach.

11B-308.2.1 Unobstructed. Where a forward reach is unobstructed, the high forward reach shall be 48 inches (1219 mm) maximum and the low forward reach shall be 15 inches (381 mm) minimum above the finish floor or ground.

11B-308.2.2 Obstructed high reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beneath the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1219 mm) maximum where the reach depth is 20 inches (508 mm) maximum. Where the reach depth exceeds 20 inches (508 mm), the high forward reach shall be 44 inches (1118 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

11B-308.3 Side reach.

11B-308.3.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 48 inches (1219 mm) maximum and the low side reach shall be 15 inches (381 mm) minimum above the finish floor or ground.

Exceptions:

1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (254 mm) maximum.
2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1372 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

11B-308.3.2 Obstructed high reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the height of the obstruction shall be 34 inches (864 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1219 mm) maximum for a reach depth of 10 inches (254 mm) maximum. Where the reach depth exceeds 10 inches (254 mm), the high side reach shall be 46 inches (1168 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

Exceptions:

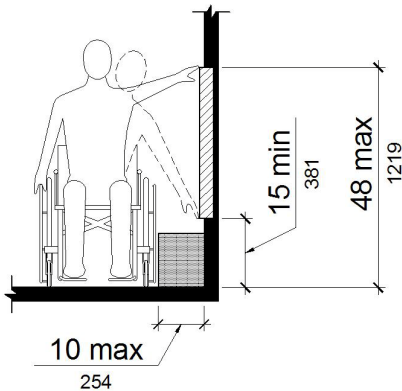
1. The top of washing machines and clothes dryers shall be permitted to be 36 inches (914 mm) maximum above the finish floor.
2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1372 mm) maximum mea-

sured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

11B-308.4 Suggested reach ranges for children. Where building elements such as coat hooks, lockers, or operable parts are designed for use primarily by children, the suggested dimensions of Table 11B-308.4 shall be permitted. These dimensions apply to either forward or side reaches.

**TABLE 11B-308.4
SUGGESTED DIMENSIONS FOR CHILDREN'S USE**

SUGGESTED REACH RANGES FOR CHILDREN AGES 3 THROUGH 12			
Forward or Side Reach	Ages 3 and 4	Ages 5 through 8	Ages 9 through 12
High (maximum)	36 inches (914 mm)	40 inches (1016 mm)	44 inches (1118 mm)
Low (minimum)	20 inches (508 mm)	18 inches (457 mm)	16 inches (406 mm)



**FIGURE 11B-308.3.1
UNOBSTRUCTED SIDE REACH**

11B-309 Operable parts

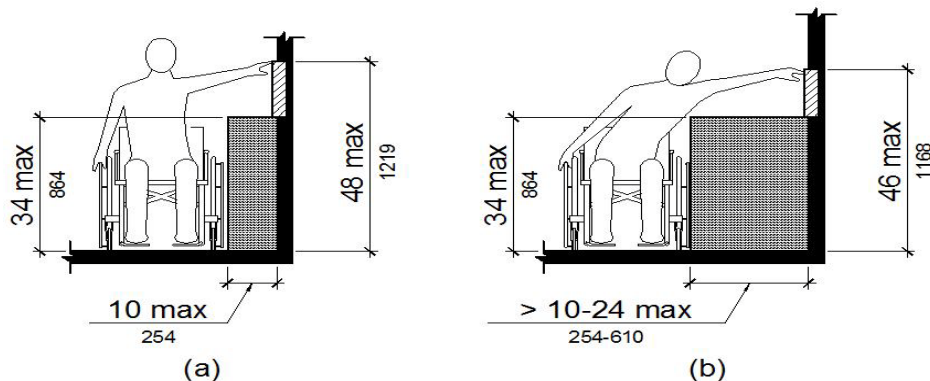
11B-309.1 General. Operable parts shall comply with Section 11B-309.

11B-309.2 Clear floor space. A clear floor or ground space complying with Section 11B-305 shall be provided.

11B-309.3 Height. Operable parts shall be placed within one or more of the reach ranges specified in Section 11B-308.

11B-309.4 Operation. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

Exception: Gas pump nozzles and electric vehicle connectors shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.



**FIGURE 11B-308.3.2
OBSTRUCTED HIGH SIDE REACH**

402 to a boarding and alighting area complying with *Section 11B-810.2*.

11B-810.4 Bus signs. Bus route identification signs shall comply with *Sections 11B-703.5.1 through 11B-703.5.4*, and *Sections 11B-703.5.7 and 11B-703.5.8*. In addition, to the maximum extent practicable, bus route identification signs shall comply with *Section 11B-703.5.5*.

Exception: Bus schedules, timetables and maps that are posted at the bus stop or bus bay shall not be required to comply.

11B-810.5 Rail platforms. Rail platforms shall comply with *Section 11B-810.5*.

11B-810.5.1 Slope. Rail platforms shall not exceed a slope of 1:48 in all directions.

Exception: Where platforms serve vehicles operating on existing track or track laid in existing roadway, the slope of the platform parallel to the track shall be permitted to be equal to the slope (grade) of the roadway or existing track.

11B-810.5.2 Detectable warnings. Platform boarding edges not protected by platform screens or guards shall have detectable warnings complying with *Section 11B-705* along the full length of the public use area of the platform.

11B-810.5.3 Platform and vehicle floor coordination. Station platforms shall be positioned to coordinate with vehicles in accordance with the applicable requirements of 36 CFR Part 1192. Low-level platforms shall be 8 inches (203 mm) minimum above top of rail.

Exception: Where vehicles are boarded from sidewalks or street-level, low-level platforms shall be permitted to be less than 8 inches (203 mm).

11B-810.6 Rail station signs. Rail station signs shall comply with *Section 11B-810.6*.

Exception: Signs shall not be required to comply with *Sections 11B-810.6.1 and 11B-810.6.2* where audible signs are remotely transmitted to hand-held receivers, or are user- or proximity-actuated.

11B-810.6.1 Entrances. Where signs identify a station or its entrance, at least one sign at each entrance shall comply with *Section 11B-703.2* and shall be placed in uniform locations to the maximum extent practicable. Where signs identify a station that has no defined entrance, at least one sign shall comply with *Section 11B-703.2* and shall be placed in a central location.

11B-810.6.2 Routes and destinations. Lists of stations, routes and destinations served by the station which are located on boarding areas, platforms, or mezzanines shall comply with *Section 11B-703.5*. At least one tactile sign identifying the specific station and complying with *Section 11B-703.2* shall be provided on each platform or boarding area. Signs covered by this requirement shall, to the maximum extent practicable, be placed in uniform locations within the system.

Exception: Where sign space is limited, characters shall not be required to exceed 3 inches (76 mm).

11B-810.6.3 Station names. Stations covered by this section shall have identification signs complying with *Section 11B-703.5*. Signs shall be clearly visible and within the sight lines of standing and sitting passengers from within the vehicle on both sides when not obstructed by another vehicle.

11B-810.7 Public address systems. Where public address systems convey audible information to the public, the same or equivalent information shall be provided in a visual format.

11B-810.8 Clocks. Where clocks are provided for use by the public, the clock face shall be uncluttered so that its elements are clearly visible. Hands, numerals and digits shall contrast with the background either light-on-dark or dark-on-light. Where clocks are installed overhead, numerals and digits shall comply with *Section 11B-703.5*.

11B-810.9 Escalators. Where provided, escalators shall comply with *Sections 6.1.3.5.6 and 6.1.3.6.5 of ASME A17.1* and shall have a clear width of 32 inches (813 mm) minimum.

Exception: Existing escalators in key stations shall not be required to comply with *Section 11B-810.9*.

11B-810.10 Track crossings. Where a circulation path serving boarding platforms crosses tracks, it shall comply with *Section 11B-402*.

Exception: Openings for wheel flanges shall be permitted to be 2½ inches (64 mm) maximum.



FIGURE 11B-810.10 (EXCEPTION) TRACK CROSSINGS

11B-811 Storage

11B-811.1 General. Storage shall comply with *Section 11B-811*.

11B-811.2 Clear floor or ground space. A clear floor or ground space complying with *Section 11B-305* shall be provided.

11B-811.3 Height. Storage elements shall comply with at least one of the reach ranges specified in *Section 11B-308*.

11B-811.4 Operable parts. Operable parts shall comply with *Section 11B-309*.

11B-812 Electric vehicle charging stations

11B-812.1 General. Electric vehicle charging stations (EVCS) shall comply with *Section 11B-812* as required by *Section 11B-228.3*. Where vehicle spaces and access aisles are marked with lines, measurements shall be made from the centerline of the markings.

Exception: Where vehicle spaces or access aisles are not adjacent to another vehicle space, access aisle, or parking space, measurements shall be permitted to include the full width of the line defining the vehicle space or access aisle.

11B-812.2 Operable parts. Operable parts shall comply with Section 11B-309.

11B-812.3 Floor or ground surfaces. Vehicle spaces and access aisles serving them shall comply with Section 11B-302. Access aisles shall be at the same level as the vehicle space they serve. Changes in level, slopes exceeding 1:48, and detectable warnings shall not be permitted in vehicle spaces and access aisles.

11B-812.4 Vertical clearance. Vehicle spaces, access aisles serving them, and vehicular routes serving them shall provide a vertical clearance of 98 inches (2489 mm) minimum. Where provided, overhead cable management systems shall not obstruct required vertical clearance.

11B-812.5 Accessible routes

11B-812.5.1 Accessible route to building or facility. EVCS complying with Section 11B-812 that serve a particular building or facility shall be located on an accessible route to an entrance complying with Section 11B-206.4. Where EVCS do not serve a particular building or facility, EVCS complying with Section 11B-812 shall be located on an accessible route to an accessible pedestrian entrance of the EV charging facility.

Exception: EVCS complying with Section 11B-812 shall be permitted to be located in different EV charging facilities if substantially equivalent or greater accessibility is provided in terms of distance from an accessible entrance or entrances, charging fee, and user convenience.

11B-812.5.2 Accessible route to EV charger. An accessible route complying with Section 11B-402 shall be provided between the vehicle space and the EV charger which serves it.

11B-812.5.3 Relationship to accessible routes. Vehicle spaces and access aisles shall be designed so that when the vehicle space is occupied the required clear width of adjacent accessible routes is not obstructed. A curb, wheel stop, bollards, or other barrier shall be provided if required to prevent encroachment of vehicles over the required clear width of adjacent accessible routes.

11B-812.5.4 Arrangement. Vehicle spaces and access aisles shall be designed so that persons using them are not required to travel behind vehicle spaces or parking spaces other than the vehicle space in which their vehicle has been left to charge.

Exceptions:

1. Ambulatory EVCS shall not be required to comply with Section 11B-812.5.4.
2. Vehicle spaces installed in existing facilities shall comply with Section 11B-812.5.4 to the maximum extent feasible.

11B-812.5.5 Obstructions. EVCS shall be designed so accessible routes are not obstructed by cables or other elements.

11B-812.6 Vehicle spaces. Vehicle spaces serving van accessible, standard accessible, ambulatory and drive-up EVCS shall be 216 inches (5486 mm) long minimum and shall com-

ply with Sections 11B-812.6.1 through 11B-812.6.4 as applicable. All vehicle spaces shall be marked to define their width.

Exceptions:

1. Where the long dimension of vehicle spaces is parallel to the traffic flow in the adjacent vehicular way, the length of vehicle spaces shall be 240 inches (6096 mm) minimum.
2. Vehicle spaces at drive-up EVCS shall be 240 inches (6096 mm) long minimum and shall not be required to be marked to define their width.

11B-812.6.1 Van accessible. Vehicle spaces serving van accessible EVCS shall be 144 inches (3658 mm) wide minimum and shall have an adjacent access aisle complying with Section 11B-812.7.

11B-812.6.2 Standard accessible. Vehicle spaces serving standard accessible EVCS shall be 108 inches (2743 mm) wide minimum and shall have an adjacent access aisle complying with Section 11B-812.7.

11B-812.6.3 Ambulatory. Vehicle spaces serving ambulatory EVCS shall be 120 inches (3048 mm) wide minimum and shall not be required to have an adjacent access aisle.

11B-812.6.4 Drive-up. Vehicle spaces serving drive-up EVCS shall be 204 inches (5182 mm) wide minimum and shall not be required to have an adjacent access aisle.

11B-812.7 Access aisle. Access aisles shall adjoin an accessible route. Two vehicle spaces shall be permitted to share a common access aisle. Access aisles shall be 60 inches (1524 mm) wide minimum and shall extend the full required length of the vehicle spaces they serve.

11B-812.7.1 Location. Access aisles at vehicle spaces shall not overlap the vehicular way and may be placed on either side of the vehicle space they serve except for van accessible spaces which shall have access aisles located on the passenger side of the vehicle spaces.

11B-812.7.2 Marking. Access aisles at vehicle spaces shall be marked with a painted borderline around their perimeter. The area within the borderlines shall be marked with hatched lines a maximum of 36 inches (914 mm) on center. The color of the borderlines, hatched lines, and letters shall contrast with that of the surface of the access aisle. The blue color required for identification of access aisles for accessible parking shall not be used. Access aisle markings may extend beyond the minimum required length.

11B-812.7.3 Lettering. The words "NO PARKING" shall be painted on the surface within each access aisle in letters a minimum of 12 inches (305 mm) in height and located to be visible from the adjacent vehicular way.

11B-812.8 Identification signs. EVCS identification signs shall be provided in compliance with Section 11B-812.8.

11B-812.8.1 Four or fewer. Where four or fewer total EVCS are provided, identification with an International Symbol of Accessibility (ISA) shall not be required.

11B-812.8.2 Five to twenty-five. Where five to twenty-five total EVCS are provided, one van accessible EVCS shall be identified by an ISA complying with Section 11B-703.7.2.1. The required standard accessible EVCS shall not be required to be identified with an ISA.

11B-812.8.3 Twenty-six or more. Where twenty-six or more total EVCS are provided, all required van accessible and all required standard accessible EVCS shall be identified by an ISA complying with Section 11B-703.7.2.1.

11B-812.8.4 Ambulatory. Ambulatory EVCS shall not be required to be identified by an ISA.

11B-812.8.5 Drive-up. Drive-up EVCS shall not be required to be identified by an ISA.

11B-812.8.6 Finish and size. Identification signs shall be reflectorized with a minimum area of 70 square inches (45 161 mm²).

11B-812.8.7 Location. Required identification signs shall be visible from the EVCS it serves. Signs shall be permanently posted either immediately adjacent to the vehicle space or within the projected vehicle space width at the head end of the vehicle space. Signs identifying van accessible vehicle spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign. Signs located within an accessible route shall be 80 inches (2032 mm) minimum above the finish floor or ground surface measured to the bottom of the sign. Signs may also be permanently posted on a wall at the interior end of the vehicle space.

11B-812.9 Surface marking. EVCS vehicle spaces shall provide surface marking stating "EV CHARGING ONLY" in letters 12 inches (305 mm) high minimum. The centerline of the text shall be a maximum of 6 inches (152 mm) from the cen-

terline of the vehicle space and its lower corner at, or lower side aligned with, the end of the parking space length.

11B-812.10 Electric vehicle chargers

11B-812.10.1 General. EV chargers shall comply with Section 11B-812.10.

11B-812.10.2 Operable parts. Operable parts and charging cord storage shall comply with Section 11B-309.

11B-812.10.3 Point-of-sale devices. Where provided, point-of-sale devices shall comply with Sections 11B-707.2, 11B-707.3, 11B-707.7.2, and 11B-707.9.

11B-812.10.4 Location. EV chargers shall be adjacent to, and within the projected width of, the vehicle space being served.

Exceptions:

1. EV chargers serving more than one EVCS shall be adjacent to, and within the combined projected width of, the vehicle spaces being served.
2. For alterations at existing facilities where an accessible route or general circulation path is not provided adjacent to the head end of the vehicle space or access aisle, the EV charger may be located within the projected width of the access aisle 36 inches (914 mm) maximum from the head end of the space.
3. Where the long dimension of a vehicle space is parallel to the vehicular way, the EV charger shall be adjacent to, and 48 inches (1219 mm) maximum from the head end or foot end of the vehicle space or access aisle being served.

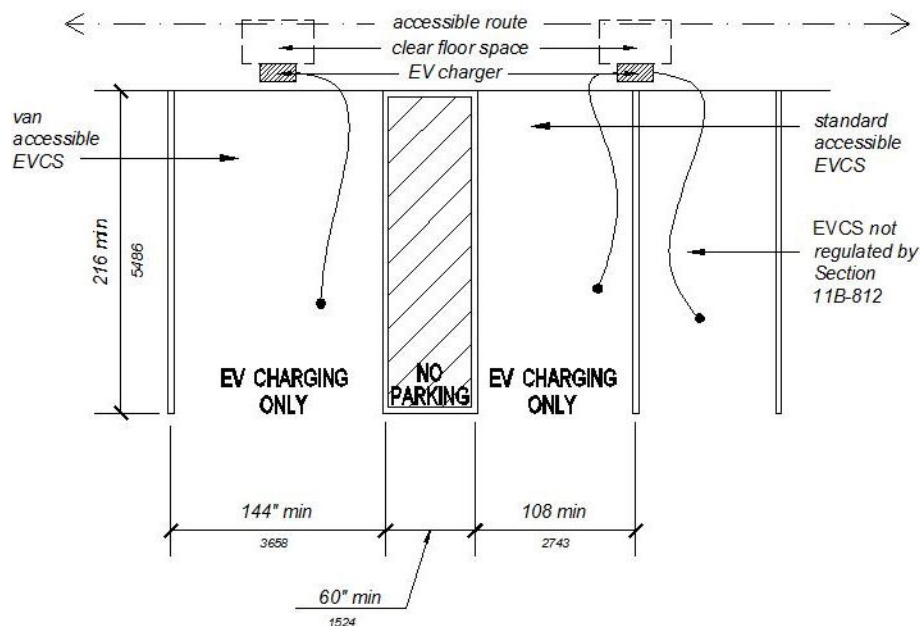


FIGURE 11B-812.9. SURFACE MARKING