



The landmark Americans with Disabilities Act (ADA), enacted on July 26, 1990, provides comprehensive civil rights protections to individuals with disabilities in the areas of employment (title I), State and local government services (title II), public accommodations and commercial facilities (title III), and telecommunications (title IV). Both the Department of Justice and the Department of Transportation, in adopting standards for new construction and alterations of places of public accommodation and commercial facilities covered by title III and public transportation facilities covered by title II of the ADA, have issued implementing rules that incorporate the Americans with Disabilities Act Accessibility Guidelines (ADAAG), developed by the Access Board.

UNITED STATES ACCESS BOARD
 A FEDERAL AGENCY COMMITTED TO ACCESSIBLE DESIGN



BULLETIN #6: PARKING

What is accessible parking?

Accessible parking requires that sufficient space be provided alongside the vehicle so that persons using mobility aids, including wheelchairs, can transfer and maneuver to and from the vehicle. Accessible parking also involves the appropriate designation and location of spaces and their connection to an accessible route.

4.1.2 Accessible Sites and Exterior Facilities: New Construction.

(5) (a) If parking spaces are provided for self-parking by employees or visitors, or both, then accessible spaces complying with 4.6 shall be provided in each such parking area in conformance with the table below. Spaces required by the table need not be provided in the particular lot. They may be provided in a different location if equivalent or greater accessibility, in terms of distance from an accessible entrance, cost and convenience is ensured.

Total in Parking Lot	Required Min. Number of Accessible 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% of total
1001 and over	20 + 1 for each 100 over 1000

How is the minimum number of accessible spaces determined?

In new construction, the minimum number of accessible spaces is determined by the total number of spaces provided in a parking lot. If there is more than one lot, the minimum is determined lot-by-lot, not by the total number of spaces provided.

Must accessible spaces be provided in each lot or on each level of parking garages?

Accessible spaces can be provided in other lots or locations, or, in the case of parking garages, on one level only when equal or greater access is provided in terms of proximity to an accessible entrance, cost, and convenience. For example, accessible spaces required for outlying parking lots may be located in a parking lot closer to an accessible entrance. The minimum number of spaces must still be determined separately for each lot even if the spaces are to be provided in other lots or locations. Accessible spaces may be grouped on one level of a parking garage in order to achieve greater access. However, where parking levels serve different building entrances, accessible spaces should be dispersed so that convenient access is provided to each entrance.

Are accessible spaces required in alterations?

In alterations, the minimum number is based on the total number of spaces altered in each lot, although it is recommended that the full number of spaces required for new construction be provided where the opportunity to do so exists within the planned scope of work. Accessible spaces are required in each altered lot. However, accessible spaces can -- and should -- be located closest to accessible entrances even where such locations lie outside the altered area or lot.

Is the restriping or resurfacing of a lot considered an alteration?

According to the definition of "alteration," normal maintenance is not considered an alteration unless the usability of the lot is affected. For example, if a lot is to be resurfaced or its plan reconfigured, accessible spaces must be provided as part of the alteration. However, work that is primarily maintenance, such as repainting existing striping, may not trigger a requirement for accessible spaces.

aisles adjacent to accessible spaces shall be 60 in (1525 mm) wide minimum.

(b) One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 in (2440 mm) wide minimum and shall be designated "van accessible" as required by 4.6.4. The vertical clearance at such spaces shall comply with 4.6.5. All such spaces may be grouped on one level of a parking structure. EXCEPTION: Provision of all required parking spaces in conformance with "Universal Parking Design" (see appendix A4.6.3) is permitted.

(c) If passenger loading zones are provided, then at least one passenger loading zone shall comply with 4.6.6.

(d) At facilities providing medical care and other services for persons with mobility impairments, parking spaces complying with 4.6 shall be provided in accordance with 4.1.2(5)(a) except as follows:

(i) Outpatient units and facilities: 10 percent of the total number of parking spaces provided serving each such outpatient unit or facility;

(ii) Units and facilities that specialize in treatment or services for persons with mobility impairments: 20 percent of the total number of parking spaces provided serving each such unit or facility.

(e)* Valet parking: Valet parking facilities shall provide a passenger loading zone complying with 4.6.6 located on an accessible route to the entrance of the facility. Paragraphs 5(a), 5(b), and 5(d) of this section do not apply to valet parking facilities.

4.6 Parking and Passenger Loading Zones.

4.6.1 Minimum Number.

Although the work undertaken may not be technically considered an alteration, accessible spaces should be provided where the work, by its nature, makes the addition of such spaces possible.

Is full compliance with ADAAG required in alterations?

In alterations, applicable ADAAG requirements must be met except where it is "technically infeasible" to do so. For example, if the resurfacing of a lot does not include regrading, it may be technically infeasible to meet the maximum 1:50 surface slope requirement for accessible parking spaces and access aisles due to existing site constraints. Similarly, if providing the number of accessible parking spaces specified by ADAAG would reduce the number of parking spaces in an altered lot below the minimum number required by a local zoning or land use code it may be technically infeasible to fully meet the ADAAG scoping requirement for accessible parking. For instance, if five accessible parking spaces are required, but the parking lot can only accommodate four accessible spaces and still meet the local code requirement for the total number of parking spaces, then four accessible parking spaces must be provided. However, many zoning adjustment boards are willing to grant limited waivers on the total number of required spaces if accessible spaces are provided.

Are accessible spaces required in existing parking lots and facilities?

ADAAG establishes minimum requirements for new construction or alterations. However, existing facilities not being altered may be subject to requirements for access. Title III of the ADA, which covers the private sector, requires the removal of barriers in places of public accommodation where it is "readily achievable" to do so. This requirement is addressed by regulations issued by the Department of Justice. Under these regulations, barrier removal must comply with ADAAG requirements to the extent that it is readily achievable to do so. For example, if, when restriping a parking lot to provide accessible spaces, it is not readily achievable to provide the full number of accessible spaces required by ADAAG, a lesser number may be provided. The requirement to remove barriers, however, remains a continuing obligation; what is not readily achievable at one point may become readily achievable in the future.

Must accessible spaces be provided in lots where parking is assigned to individual employees or to paying customers?

ADAAG does not distinguish between lots or garages with assigned spaces and those without. Thus, in lots or garages comprised only of spaces that are leased or assigned to employees, accessible spaces are required. However, in such situations, policies regarding the use of accessible spaces may be feasible so long as they do not discriminate against persons with disabilities. For example, in lots reserved for employees only, accessible spaces may be used by persons without disabilities when they are not needed by employees with disabilities.

Medical Care and Other Services for Persons with Mobility Impairments

A greater number of accessible parking spaces is required at facilities providing medical care and other services for persons with mobility impairments. The term "mobility impairments" is intended to include:

- conditions requiring the use or assistance of a brace, cane, crutch, prosthetic device, wheelchair or other mobility aid;
- arthritic, neurological, or orthopedic conditions that severely limit one's ability to walk;
- respiratory diseases and other conditions which may require the use of portable oxygen; or
- cardiac conditions that impose significant functional limitations.

At outpatient facilities, 10% of the parking spaces must be accessible. Facilities

Parking spaces required to be accessible by 4.1 shall comply with 4.6.2 through 4.6.5. Passenger loading zones required to be accessible by 4.1 shall comply with 4.6.5 and 4.6.6.

4.6.2 Location.

Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance.

In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility. In buildings with multiple accessible entrances with adjacent parking, accessible parking spaces shall be dispersed and located closest to the accessible entrances.

4.6.3* Parking Spaces.

Accessible parking spaces shall be at least 96 in (2440 mm) wide. Parking access aisles shall be part of an accessible route to the building or facility entrance and shall comply with 4.3. Two accessible parking spaces may share a common access aisle (see Fig. 9). Parked vehicle overhangs shall not reduce the clear width of an accessible route. Parking spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2%) in all directions.

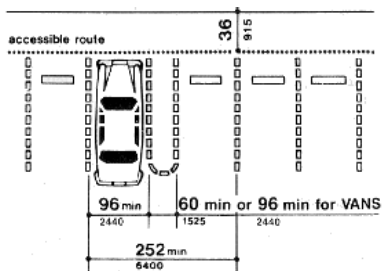


Fig. 9
Dimensions of Parking Spaces

4.6.4* Signage.

Accessible parking spaces shall be designated as reserved by a sign showing the symbol of accessibility (see 4.30.7). Spaces complying

that specialize in medical treatment and other services for persons with mobility impairment are required to have 20% of parking spaces accessible. Other facilities (including medical care facilities) that do not provide outpatient services or specialized service for persons with mobility impairments are subject only to the general scoping requirement in the table in ADAAG 4.1.2(5)(a).

What is an outpatient facility?

An outpatient facility is part of a medical care facility, such as a hospital's clinic or ambulatory care center that provides regular and continuing medical treatment to patients without overnight stay. As defined in the guidelines, medical care facilities are facilities in which the period of stay may exceed 24 hours and physical or medical treatment or care is provided where persons may need assistance in responding to an emergency. Under these guidelines, the term "outpatient facility" does not include doctors' offices, independent clinics, or other facilities not located in medical care facilities.

Facilities and Units Specializing in Treatment or Services for Persons with Mobility Impairments

Facilities or units that specialize in treatment or other services for persons with mobility impairments, including vocational rehabilitation and physical therapy, must have 20% of parking spaces accessible. These are facilities in which the treatment or service specifically serves persons with mobility impairments, such as spinal cord injury treatment centers, prosthetic and orthotic retail establishments, and vocational rehabilitation centers for persons with mobility impairments. This requirement does not apply to facilities providing, but not specializing in, services or treatment for persons with mobility impairments, such as general rehabilitative counseling or therapy centers. In determining whether a facility is subject to this requirement, both the nature of the services or treatment provided and the population they serve should be carefully considered.

Do the 10% and 20% requirements apply to employee parking spaces as well?

The higher percentages required for outpatient facilities or those facilities specializing in treatment and services for persons with mobility impairments are intended primarily for visitor and patient parking. If there are separate lots for visitors or patients and employees, the 10% or 20% requirement may be applied only to the visitor/patient lot while accessible parking could be provided in the employee lot according to the general scoping requirement in the chart. If a lot serves both visitors or patients and employees, 10% or 20% of the spaces intended for use by visitors or patients must be accessible.

If a hospital with an outpatient unit is served generally by one lot, must 10% of all spaces be accessible?

At medical care facilities where parking does not specifically serve an outpatient unit, only a portion of the lot would need to comply with the 10% scoping requirement. A local zoning code that requires a minimum number of parking spaces according to occupancy type and square footage may be an appropriate guide in assessing the number of spaces in the lot that "belong" to the outpatient unit. These spaces would be held to the 10% requirement while the rest of the lot would be subject to the general scoping requirement in the chart. Those accessible spaces required for the outpatient unit should be located at the accessible entrance serving the unit. This method may also be used in applying the 20% requirement to hospitals or other facilities where only a portion or unit provides specialized treatment or services for persons with mobility impairments.

Are accessible spaces required where valet parking is provided?

Parking facilities that provide valet parking only are not required to provide accessible spaces but must have an accessible passenger loading zone that is connected to a facility entrance by an accessible route. However, it is strongly recommended that some accessible parking be provided even if valet parking is

with 4.1.2(5)(b) shall have an additional sign "Van-Accessible" mounted below the symbol of accessibility. Such signs shall be located so they cannot be obscured by a vehicle parked in the space.



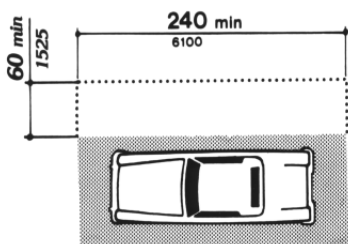
**Display Conditions
International Symbol of
Accessibility**

4.6.5* Vertical Clearance.

Provide minimum vertical clearance of 114 in (2895 mm) at accessible passenger loading zones and along at least one vehicle access route to such areas from site entrance(s) and exit(s). At parking spaces complying with 4.1.2(5)(b), provide minimum vertical clearance of 98 in (2490 mm) at the parking space and along at least one vehicle access route to such spaces from site entrance(s) and exit(s).

4.6.6 Passenger Loading Zones.

Passenger loading zones shall provide an access aisle at least 60 in (1525 mm) wide and 20 ft (240 in)(6100 mm) long adjacent and parallel to the vehicle pull-up space (see Fig. 10). If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp complying with 4.7 shall be provided. Vehicle standing spaces and access aisles shall be level with surface slopes not exceeding 1:50 (2%) in all directions.



**Fig. 10
Access Aisle at Passenger
Loading Zones**

available. Some vehicles may be specially adapted with hand controls only or lack a driver's seat and may not be operable by an attendant. In addition, accessible spaces must be provided if valet service is not available during all hours of operation for users who must sometimes retrieve or park their own vehicles.

Is the accessible route leading from accessible spaces prohibited from being located behind other spaces?

Access aisles must connect to an accessible route leading to an accessible entrance of a facility. ADAAG Fig. 9, which illustrates an access aisle shared by two accessible spaces, does not require a specific configuration for the connecting accessible route. However, it is strongly recommended that the accessible route not require travel behind other parking spaces since persons who use wheelchairs are not easily visible to drivers. Where this is not possible, the accessible route should run behind accessible parking spaces only.

Can curb ramps be provided within the access aisle?

The maneuvering necessary to enter or exit vehicles and to transfer to and from wheelchairs requires that all accessible spaces, access aisles, and passenger loading zones be level, with slopes no greater than 2% in any direction. This does not apply to an entire parking lot or level of a parking structure but does include connecting accessible routes which cannot have cross slopes greater than 2%. For safe transfer, access aisles must be level for their full length. Thus, curb ramps, including built-up ramps, are not permitted within the area -- the full length and width -- of access aisles serving either parking spaces or passenger loading zones. Curb ramp openings must be located at the boundary of the access aisle, not the parking space, so that the ramp is not blocked by a parked vehicle. In addition, the required size of access aisles and width of the accessible route cannot be reduced by planters, curbs, or wheel stops.

Does ADAAG contain specifications for the striping of parking spaces or the designation of accessible spaces on the surface of the parking space?

ADAAG does not specify the method or color in which accessible spaces are striped nor does it require placement of the access symbol on the surface of parking spaces. Local codes, not ADAAG, may contain requirements for the striping of spaces, including color, and any surface decals or designations.

At what location and height is signage to be mounted?

ADAAG does not include a specific location or minimum height for signs but requires them to be placed so as not to be "obscured" by a car or van parked in the space. Access symbols provided on the surface of the space do not meet this requirement. Posted signage is typically placed in front of the space but signs can also be mounted on walls or other elements that are in close proximity to the space. Since many local codes address the height of exterior signage, a minimum mounting height is not specified in ADAAG.

What are requirements for the size and color of signs?

ADAAG requires accessible spaces to be designated by the international symbol of accessibility but does not address the color or size of parking signs, which may be regulated by local code. The "van-accessible" designation is subject to requirements for informational signage found in ADAAG 4.30 and must comply with the specifications for character proportion (4.30.2), height (4.30.3), and sign finish and contrast (4.30.5).

Must a sign be provided at each accessible parking space?

While ADAAG requires parking spaces to be designated by the access symbol, it does not specifically require the designation of each space. Alternatives to signs at each space are allowed so long as spaces reserved for use by persons with disabilities are clearly designated and distinguished from other parking spaces.

A4.1.2 Accessible Sites and Exterior Facilities: New Construction.

A4.1.2(5)(e) Valet parking is not always usable by individuals with disabilities. For instance, an individual may use a type of vehicle controls that render the regular controls inoperable or the driver's seat in a van may be removed. In these situations, another person cannot park the vehicle. It is recommended that some self-parking spaces be provided at valet parking facilities for individuals whose vehicles cannot be parked by another person and that such spaces be located on an accessible route to the entrance of the facility.

A4.6 Parking and Passenger Loading Zones.

A4.6.3 Parking Spaces. The increasing use of vans with side-mounted lifts or ramps by persons with disabilities has necessitated some revisions in specifications for parking spaces and adjacent access aisles. The typical accessible parking space is 96 in (2440 mm) wide with an adjacent 60 in (1525 mm) access aisle.

However, this aisle does not permit lifts or ramps to be deployed and still leave room for a person using a wheelchair or other mobility aid to exit the lift platform or ramp. In tests conducted with actual lift/van/wheelchair combinations, (under a Board-sponsored Accessible Parking and Loading Zones Project) researchers found that a space and aisle totaling almost 204 in (5180 mm) wide was needed to deploy a lift and exit conveniently.

The "van accessible" parking space required by these guidelines provides a 96 in (2440 mm) wide space with a 96 in (2440 mm) adjacent access aisle which is just wide enough to maneuver and exit from a side mounted lift. If a 96 in (2440 mm) access aisle is placed between two spaces, two "van accessible" spaces are created. Alternatively, if the wide access aisle is provided at the end of a row (an area often unused), it may be possible to provide the wide

Is "front-in" only parking prohibited by ADAAG?

Accessible spaces are required to be served by an access aisle which can be placed on either side of the parking space. Drivers may pull in or back in to perpendicular parking spaces depending on which side of the space is served by an access aisle and whether a person with a disability wishes to exit the vehicle from the driver's or the passenger's side. Accessible spaces that drivers can only pull into do not afford the same level of flexibility. ADAAG does not specifically address or prohibit "front-in" only parking. Thus, it is recommended that where such parking is provided, accessible spaces be designed so as to allow "back-in" parking also or that access aisles be provided to serve each side of a space. With respect to van-accessible spaces, it is recommended that the access aisle be provided on the passenger side of spaces since van side doors and side-mounted lifts are typically located on the passenger side.

Accessible Van Parking Spaces

The growing use of vans by persons with mobility impairments has led to a requirement for some accessible spaces that accommodate van users. Most often, vans are equipped with a lift or ramp at a side door. According to research sponsored by the Access Board, almost 17 feet in width is needed for the convenient deployment and use of a van-mounted lift. ADAAG requires the access aisle serving a van space to be at least 8 feet wide, as is the parking space itself, for a combined minimum width of 16 feet. Since accessible spaces may share an access aisle, a single eight-foot aisle can serve two van spaces without additional space impact.

Minimum Number of Van-Accessible Spaces

One of every eight spaces is required to have an eight foot aisle to accommodate van users. Where spaces share access aisles, it is recommended that both spaces served by the 8 foot aisle be designated as "van-accessible."

Required Minimum Number of:	
<u>Accessible Spaces</u>	<u>Van-Accessible Spaces</u>
1 to 8	1
9 to 16	2
17 to 24	3
25 to 32	4
33 and over	1 additional van-accessible space for every 8 accessible spaces

Must van-accessible spaces be restricted to van use?

The required "van-accessible" designation, which should be located beneath the international symbol of accessibility, is intended to be informative, not restrictive, in identifying those spaces that are better suited for van use. It should not be interpreted as restricting the use of spaces to vans only. Additional signage may be provided recommending that cars not be parked in van-accessible spaces unless no other accessible parking space is available. This distinction could be particularly helpful in those lots where only one accessible space is required, since ADAAG requires that space to be van-accessible.

Universal Parking Spaces

As an alternative to providing both accessible and van-accessible spaces, "universal" parking spaces may be provided. Universal parking does not require the specific designation of van spaces since each accessible space can accommodate either a car or van. This design features wider parking spaces that are at least 11 feet wide with standard access aisles at least 5 feet wide. The wider space allows users to park to one side or the other of the space, which may ease transfer and travel from the vehicle, especially when an access aisle is provided on only one side of the space.

access aisle without additional space (see Fig. A5(a)).

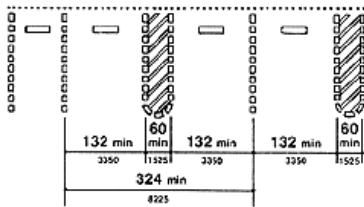
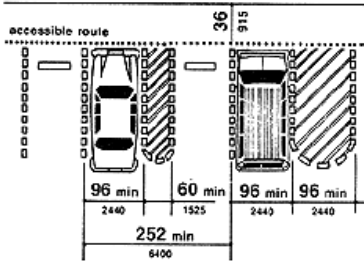


Fig. A5
Parking Space Alternatives

A sign is needed to alert van users to the presence of the wider aisle, but the space is not intended to be restricted only to vans.

"Universal" Parking Space Design.
An alternative to the provision of a percentage of spaces with a wide aisle, and the associated need to include additional signage, is the use of what has been called the "universal" parking space design. Under this design, all accessible spaces are 132 in (3350 mm) wide with a 60 in (1525 mm) access aisle (see Fig. A5(b)). One advantage to this design is that no additional signage is needed because all spaces can accommodate a van with a side-mounted lift or ramp. Also, there is no competition between cars and vans for spaces since all spaces can accommodate either. Furthermore, the wider space permits vehicles to park to one side or the other within the 132 in (3350 mm) space to allow persons to exit and enter the vehicle on either the driver or passenger side, although, in some cases, this would require exiting or entering without a marked access aisle.

Passenger Loading Zones

An accessible passenger loading zone is required only where passenger loading zones are specifically designed for passenger loading and unloading. Areas not so designed are not subject to this requirement even if, as a practical matter, some drivers may use them for this purpose.

Both the pull-up space and adjacent access aisle are required to be level with surface slopes no greater than 2% in any direction. Since the 2% slope requirement applies to the entire aisle surface, curb ramps should be located next to -- not within -- the aisle, preferably at both ends. Further, there can be no obstructions, such as planters or street furniture, in the access aisle area.

Why does the vertical clearance for parking differ from that required for passenger loading zones?

Because vans used for accessible transit and paratransit may have higher roofs than those owned and used by most individuals, the minimum vertical clearance required for passenger loading zones (114 inches) is higher than the one specified for van-accessible spaces (98 inches). The minimum clearance for van-accessible spaces also applies to at least one vehicular route leading from the entrance to the space and one from the space to an exit. Since this clearance may affect the design of multi-level parking structures, van-accessible spaces may be grouped on one level of the structure; providing van-accessible spaces outside parking structures should not be considered as an alternative if equivalent convenience is not provided. Moreover, placement of accessible spaces outside a parking structure may be considered discriminatory if it is not part of an integrated setting and if the same amenities of interior parking, such as weather protection, security, and convenience, are not provided.

This technical assistance is intended solely as informal guidance; it is not a determination of the legal rights or responsibilities of entities subject to the ADA.

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An essential consideration for any design is having the access aisle level with the parking space. Since a person with a disability, using a lift or ramp, must maneuver within the access aisle, the aisle cannot include a ramp or sloped area. The access aisle must be connected to an accessible route to the appropriate accessible entrance of a building or facility. The parking access aisle must either blend with the accessible route or have a curb ramp complying with 4.7. Such a curb ramp opening must be located within the access aisle boundaries, not within the parking space boundaries. Unfortunately, many facilities are designed with a ramp that is blocked when any vehicle parks in the accessible space. Also, the required dimensions of the access aisle cannot be restricted by planters, curbs or wheel stops.

A4.6.4 Signage.

Signs designating parking places for disabled people can be seen from a driver's seat if the signs are mounted high enough above the ground and located at the front of a parking space.

A4.6.5 Vertical Clearance.

High-top vans, which disabled people or transportation services often use, require higher clearances in parking garages than automobiles.