Accessible car parking spaces

If you design, manage or approve car parking spaces, you need to make sure that some are accessible to people with disabilities. Find out why they are needed and how they should be designed.

This information is about providing car parking spaces that are suitable for use by people with disabilities, particularly wheelchair users and others with mobility aids. It has been written mainly for off-street car parking associated with buildings or building complexes, but the general requirements also apply to stand-alone municipal car parks.

Barrier Free New Zealand Trust (http://www.barrierfreenz.org.nz/) and MBIE have jointly written this guide. It includes guidance from the Trust on locating and managing accessible car parks.

The need for accessible car parking

Most people with impaired mobility depend on the use of a privately owned motor vehicle or a designated maxi-taxi with a hoist for their transport needs. Both forms of transport are essential to enable them to participate fully in the everyday working, recreational, educational and social life of the community.

Many wheelchair users are able to drive a car. The wheelchair is carried inside the car or mounted on a roof hoist. However, a wider than normal car parking space is needed so there is room to place the wheelchair along-side the car door and to transfer to it.

A route is also needed from the park to the associated building that a wheelchair user can travel along without assistance (defined as an 'accessible route').

Some public transport has been adapted for wheelchair users but, in practice, the use of public transport on a regular basis is not yet feasible for many wheelchair users or for some people with an ambulatory disability. Apart from the difficulty gaining access to the bus or train itself, there is often a long travel distance at each end of the public transport route.

A good accessible parking space.

Understanding Building Code Clause D1
The Building Code sets performance criteria that building work must achieve. The Building Code does not prescribe how the building should be constructed, but states how the completed building must perform. The Building Act 2004 requires certain buildings to be accessible for people with disabilities, and these buildings must meet the building code's performance criteria relating to accessibility.

Clause D1 Access Routes is the clause of the Building Code relevant to car parking.

Clause D1.1 includes the Objective to:

- ensure people with disabilities are able to enter and carry out normal activities and functions within buildings.

This Objective, as well as the Performance criteria quoted below, applies to the types of buildings to which section 118 of the Building Act applies, and includes those buildings listed in Schedule 2 of the Act.

Clause D1.2.2 includes the Functional Requirement, applying to all buildings, that:

- where a building is provided with loading or parking spaces, they shall be constructed to permit safe and easy unloading and movement of vehicles, and to avoid conflict between vehicles and pedestrians.

Clause D1.3.2 has a Performance criterion:

- At least one access route shall have features to enable people with disabilities to approach the building from the street boundary, or where required to be provided, the building car park.

Clause D1.3.6 is an additional parking Performance criterion for vehicle spaces used by people with disabilities:

- Vehicle spaces for use by people with disabilities, shall, in addition to the requirements of D1.3.5 [which includes appropriate dimensions, crossfall and slope] be:
  a. Provided in sufficient numbers
  b. Located to avoid conflict between vehicles and people using or moving to or from the space, and
  c. Easy to find as required by Clause F8 Signs.

When to provide accessible parks

Clause D1.3.2 requires an accessible route to the building from the building car park where required to be provided. The Building Code does not require buildings to have associated car parking, but Clause D1 of the building code has a number of requirements for situations when parking is provided for whatever reason.

Car parking is often required under the district plan of the territorial authority area where the building is located. These plans vary from place to place, with most requiring minimum parking numbers to service a development. Some cities specify a maximum number in particular situations, such as the Wellington Central Area where parking must not exceed 'a maximum of one space per 100sqm of floor area'.

Accessible parking is necessary for people with disabilities both as potential visitors and as workers in any building.

What does the D1 acceptable solution say?

MBIE produces acceptable solutions that give one way of complying with the Building Code. Acceptable solution D1/AS1 describes how to comply with the performance criteria of clause D1. D1/AS1 in paragraph 10 Movement of vehicles refers to an Australian Standard, AS 2890.1:1993 Parking Facilities Off Street Car Parking. A revised version of this standard has been published, but the accessible car park width of the 1993 version still applies.

The parts of paragraph 10 applying to accessible car parks state:

10.1 Car parking areas

10.1.1 AS 2890: Part 1 as modified by Paragraph 10.2 is an acceptable solution for car parking areas and circulation routes.

Comment: The width of an accessible car park is given in AS 2890.1 Figure 2.2 as 3.2m, but it is noted in 2.4.1 (b) (ii) of the Standard that if there...
is an adjacent obstruction the width of all car parks should be increased by 300mm. In the case of an accessible car park, an obstruction would include a kerb or garden which would prevent the movement of a wheelchair.

10.2 Modifications to AS 2890: Part 1 is modified as follows:

Appendix C: Delete and replace with:

"Accessible car parking spaces shall be provided on the scale of:

- one for up to 10 total spaces provided
- two for up to 100 total spaces provided

plus 1 more for every additional 50 spaces when car parks are provided in or associated with a building which is accessible."

Car parks and the New Zealand access standard (NZS 4121)

You can find detailed information about car parks in Section 5 of NZS 4121:2001 Design for access and mobility buildings and associated facilities. The Building Act 2004 deems NZS 4121 to be an acceptable solution. This means that if NZS 4121 is followed, then the performance criteria of Clause D1 for accessible parking have been met.

The Standard covers:

- location
- appropriate signs
- number of parks
- park dimensions
- ground or floor surface
- access to and from the park
- position of ticket dispensers.

How many parks are needed?

NZS 4121 gives the following figures:

<table>
<thead>
<tr>
<th>Total number of car parks</th>
<th>Number of accessible spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-20</td>
<td>Not less than 1</td>
</tr>
<tr>
<td>21-50</td>
<td>Not less than 2</td>
</tr>
<tr>
<td>For every additional 50</td>
<td>Not less than 1</td>
</tr>
</tbody>
</table>

The number of parks specified in D1/AS1 is slightly less than in NZS 4121:2001. For 200 parks in total, D1/AS1 requires four accessible parks while NZS 4121 requires five.

The reason for the difference is that D1/AS1 followed the earlier version of NZS 4121 and it has not been revised since the 2001 version of the Standard was published. Until D1/AS1 is revised, its method of calculation can be used, but the Barrier Free Trust believes the NZS 4121:2001 method should be followed.

Where there are more than 400 car parks, such as a sports stadium or mall, the Barrier Free Trust suggests a simple calculation of two percent of the total number of car parks, for up to 1000 parks, is reasonable. If there are more than 1000 parks, a figure of 20 plus 1 percent of the number of parks over 1000 is appropriate.

Key features of an off-street accessible car park

NZS 4121 includes key features of an off-street accessible park as follows:
The paving is flush with the park making access easy.

The accessible route to the ramp is clearly defined, in relation to:

- **safety** – there should be no abrupt changes of gradient other than kerb ramps where needed. There should be no need to pass behind parked cars to reach an accessible park
- **signs** – the usual convention is to mark the park with yellow paint. The International Symbol of Access is applied to the surface of the park. Other signs indicate the direction to the park along the route from the street as well as the park itself
- **ticket dispensers** – a ticket dispenser or other device should be placed at a height of 1000-1100mm and not more than 200mm horizontally behind the kerb below.

Parking buildings

Parking buildings must provide a suitable number of accessible parks, as set out in NZS 4121 and recommended above (see Car parks and the New Zealand access standard). These parks should be suitably located so that those needing them are not disadvantaged in terms of average travel distances to lifts and to entrances and exits. Locating the accessible parks on the ground level may be the best solution in many cases.

Parking buildings are usually constructed with the minimum practicable headroom. Wheelchair users who transport their chairs on a car roof hoist need additional headroom to rotate the chair to the floor next to the driver’s door. AS 2890.1: 1993, the car parking Standard referenced in D1/AS1, specifies a headroom height of 2.5 m over the distance between the rear of the parking space and a position about where the windscreen of a parked car would be located. (This position is specified as 2160 mm from the front of the park.) The Standard specifies a minimum headroom of 2.2 m for other parks and for the internal access driveways.

NZS 4121:2001 requires a vertical clearance of 2.5 m along the internal access driveways, as well as above the rear of the accessible parking space itself. In some buildings this headroom can be easily achieved, but in other cases AS 2890.1 may be followed.

Reserved car parking spaces
Many businesses and offices have a limited number of car parks available for their exclusive use. For example, each tenancy in a multi-storey building could have four car parks reserved for their own use in the buildings parking floor. Each park may have a high monetary value. The total number of parks in the building might require two accessible parks, and these two parks should be marked and sign-posted in the usual way.

However, the Barrier Free Trust suggests they can be made available to anyone in the building on a day-to-day basis provided arrangements are made for them to be vacated when a person with a disability needs a parking space.

Building managers must control accessible parks in this situation. They could act through reception staff in the different tenancies. This arrangement can work well for people with disabilities, while also making full use of expensive car parks. The use of the accessible parks should be part of the contractual agreement between owner and every tenant.

Car parks allocated to a building can sometimes be on another site. If this is the case, there must be an accessible route from the parking area to the building it is associated with.

### Parking permits

CCS Disability Action issues Mobility Parking Permits to people with specified disabilities. These permits are recognised under territorial authority bylaws as a permit for parking in marked accessible car parks on land and roads owned or administered by the territorial authority.

Cars not displaying the permit may be given parking infringement notices or towed away. Accessible car parks on private land, such as at a supermarket, are not subject to Mobility Parking Permits unless the property owner specifies that they must be displayed. In this case, the sign at the park would say a Mobility Parking Permit is necessary.

### Motels

An accessible car park is required for each accessible unit in a motel. The park is usually positioned directly outside the unit and there should be no obstructive kerbs or landscaping between it and the unit.

The Barrier Free Trust considers that the accessible park can be used by whoever is using the accessible unit.

### Upgrading existing buildings

The types of building that must be accessible for people with disabilities are those to which section 118 of the Building Act 2004 applies, and include the buildings listed in Schedule 2 of the Act.

[Compliance schedules](https://www.building.govt.nz/projects-and-consents/sign-off-and-maintenance/completing-your-project/compliance-schedules/) can give you more information.

When an existing building that must be accessible undergoes an alteration or change of use, under section 112 or 115 of the Act its access must be upgraded to the standard of a new building as nearly as is reasonably practicable. Accessible car parking is one of the access features that may be upgraded.
need to be provided when an older building is upgraded.

All buildings constructed with car parking since 1993, when the Building Code came into effect, should have accessible parks. However, an accessible park can disappear because removal of its paint marking and signage can easily be done when a parking area is reconfigured, with no building consent required.

Consequently, alterations or changes of use are an opportunity for the territorial authority to check that the accessible parking is being maintained.

Making it happen

Providing accessible car parks in a car parking area is a very simple thing to do but is sometimes overlooked by building designers who are more concerned with the building itself.

Nevertheless, an acceptable solution includes compliance with the building code clause D1 requirement for accessible car parking.

An accessible park allows people with mobility disabilities much easier access to buildings, and wheelchair users in particular are able to visit or work in a building otherwise out of reach. The accessible car park makes an important contribution to ensuring people with disabilities are able to take part in normal everyday activities.

Disclaimer: This information is not an acceptable solution, and may be updated from time to time. It has been produced by MBIE in association with the Barrier Free New Zealand Trust. It is not a substitute for professional advice, which should be sought for establishing compliance with the relevant requirements of the Building Act 2004 in individual cases.

Related determinations

**Determination 2002/005** [https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2002-005/](https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2002-005/) considers the need for access and facilities in the reconstruction of a shop. In section 6.4 it looks at whether existing routes of travel into the building for people with disabilities are adequate and reasonable. It concluded that the routes for people with disabilities were neither adequate or reasonable.

This determination also relates to lifts and accessible toilets.