

Traffic Advisory Leaflet 5/95
April 1995



PARKING FOR DISABLED PEOPLE

Introduction

Many disabled people rely on cars for getting about. Whether they drive themselves or ride with someone else, the ease with which they can reach their destination is almost always determined by where the car can be parked. Parking bays for disabled people should be conveniently located and clearly signed. Any parking control equipment should be positioned so that it can be operated conveniently by disabled people, some of whom will be in wheelchairs.

This leaflet gives advice to local authorities and car park owners and operators. It is intended to

help them in providing for those with all types of mobility difficulty who wish to park on and off the street. Much of the detailed advice is drawn from publications by the Department of Transport, the Institution of Highways and Transportation, the Automobile Association and others, updated as necessary. Details of the Orange Badge scheme are not covered here, but can be found in DOT's leaflet "The Orange Badge Scheme", and for sites in London in the leaflet "Information for Orange Badge Holders" issued by the Parking Committee for London.



Location of Parking Bays

As pedestrians, many disabled people will have a limited mobility range, and will require specially designated parking bays closer to the places they wish to visit. Whether onstreet or off-street, parking bays for disabled people should not be further from major destinations (eg bank, post office, large store, supermarket) than shown in Table 1:

TABLE 1 - Recommended maximum walking distance without a rest according to disability ("walking" includes travel by wheelchair)

Disability	Distance (metres)
Visually Impaired	150
Wheelchair users	150
Ambulatory without walking aid	100
Stick users	50

Further details are available in "Reducing Mobility Handicaps" from the Institution of Highways and Transportation. Distances should be reduced where there are significant gradients, but may be increased by providing suitable resting places for people to break their journeys. Provision of wheelchairs for those who may need them can also help. One example is the "shopmobility" scheme, where wheelchairs may be borrowed or hired at the car-parking place; some schemes provide volunteer escorts, some have electric scooters, and all but a few are linked to parking areas or public transport. Details are available from the National Association of Shopmobility.

If distances are greater than recommended, many parts of the area will be either too far to reach or reachable only with an unacceptably arduous or time consuming effort. Special parking bays for disabled people may therefore be needed in heavily used parking areas, on-street or off-street, or where it is desirable to reduce the need for disabled people to park on yellow lines. If there is insufficient off-street parking for disabled people within the distaces shown in Table 1, then extra on-street bays may be required. If that is impracticable, spaces should be provided in car parks which are nearest to the major destinations, and every effort should be made to provide

resting places on pedestrian routes to and from those car parks.

In ground level and multi-storey car parks, bays designated for disabled people should be close to main pedestrian accesses. If possible, they should also be adjacent to other facilities such as accessible toilets, or major buildings such as day centres, libraries, or railway stations.

In multi-storey car parks, bays should be located on the level(s) at which the main pedestrian access points connect to major destinations. These include town centre pedestrian ways, large stores and shopping malls. The bays themselves and the main pedestrian access ways to them should all be well lit. Heavy or stiffly sprung doors should not be used.

A number of towns are introducing park-and-ride services to improve access to their town centres. Wherever possible they should cater for disabled people. Specially marked bays for disabled people should have easy access to the interchange with the "ride" element of the journey. Distances to the bus stopping area should not be greater than those shown in Table 1. If the buses are not wheelchair accessible, this should be clearly advertised.

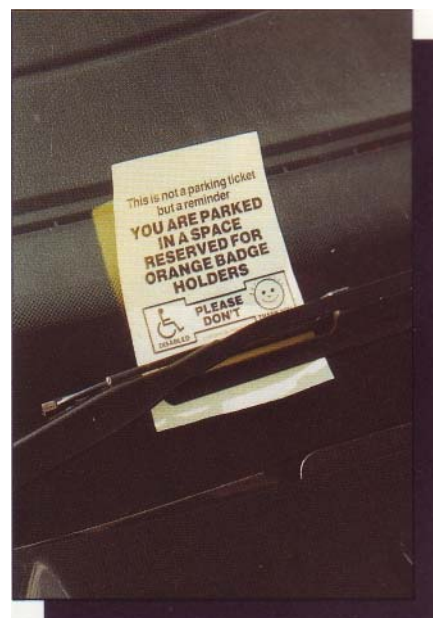


Provision and Enforcement

Designated bays can be provided on the highway or in offstreet parks operated by local authorities under section 6 (with respect to free on-street bays in London), 32 and 35(1) of the Road Traffic Regulation Act 1984. They are fully enforceable bylaw and appropriate signs should be provided to indicate that parking by other vehicles is prohibited. In privately operated car parks, where bays are not backed by an order, every effort should be made to ensure specially marked bays are used only by those displaying the appropriate permit.

The arrangements relating to parking boxes for holders of disabled people's permits on London's Priority (Red) Routes are described in general terms in the Traffic Director for London's Network Plan.

A guide to the number of bays which should be provided in off-street parks is shown in Table 2; further details are available in "Reducing Mobility Handicaps".



Car Park Used For:	Car Park Size	
	Up to 200 Bays	Over 200 Bays
Employees and visitors to business premises	Individual bays for each disabled employee plus 2 bays or 5% of total capacity whichever is greater	6 bays plus 2% of total capacity
Shopping, recreation and leisure	3 bays or 6% of total capacity whichever is greater	4 bays plus 4% of total capacity

TABLE 2 - Recommended number of bays in off-street car parks

In all car parks, use of reserved bays should be regularly monitored and the number adjusted to ensure the needs of disabled people are fully met. There are no similar recommendations for the number of on-street parking bays.



Design of Parking Bays

Parking bays for disabled people should be designed so that drivers and passengers, either of whom may be disabled, can get in and out of the car easily and safely. Bays should be longer and wider than normal. They ensure easy access from the side and the rear for those with wheelchairs, and protect disabled people from moving traffic when they cannot get in or out of their car on the footway side of a bay on the highway.

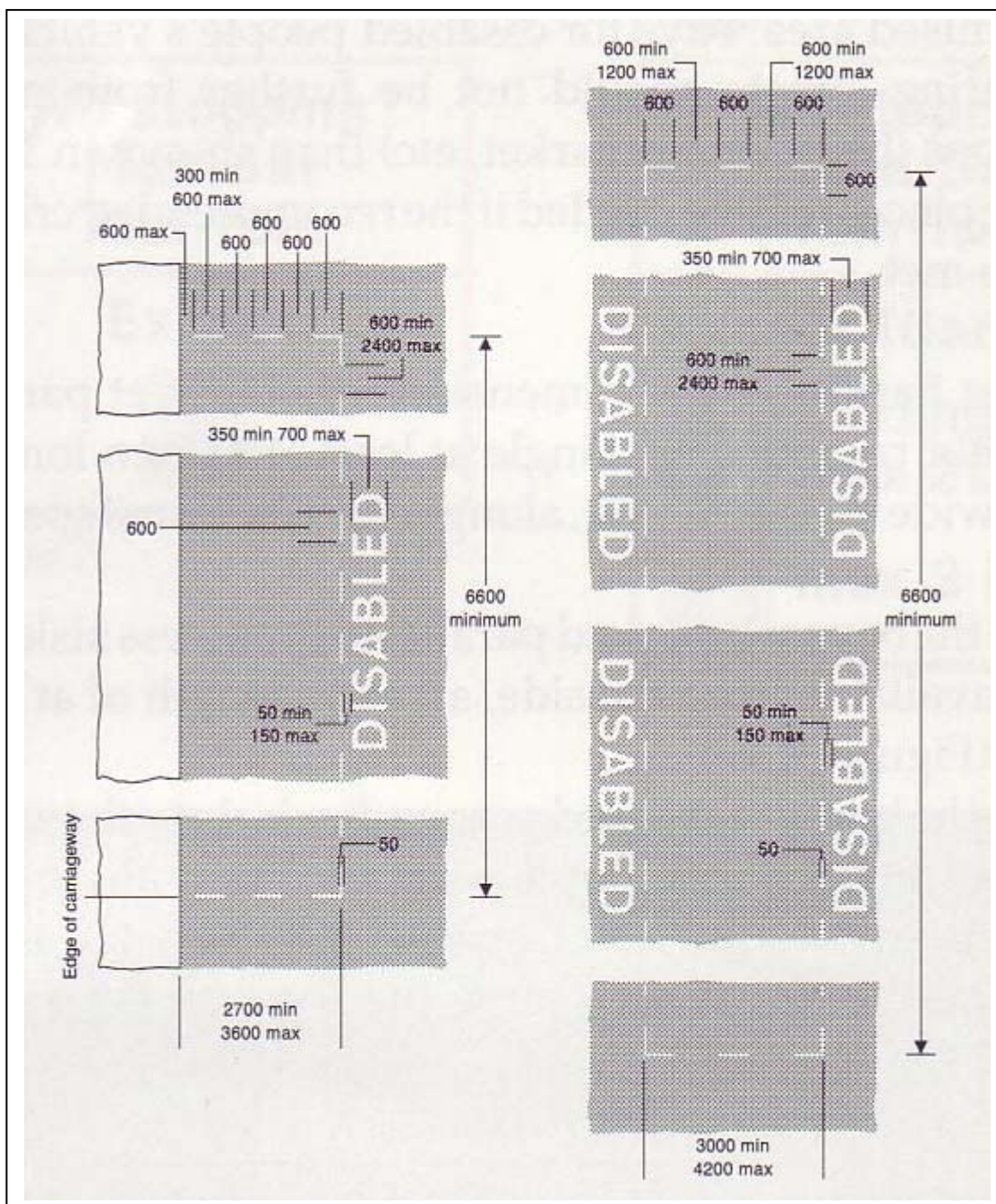


Figure 1

On-street Parking Parallel to the Kerb - Bays should be designated by an Order under the Road Traffic Regulation Act 1984 for use by holders of permits for disabled people. Other than on those lengths of roads in London which are subject to Priority (Red) Route controls, bays must have dimensions which conform with Diagram 1028.3 of "Traffic Signs Regulations and General Directions" (TSRGD) (Figure 1). The minimum length of 6600mm allows access to the rear of the vehicle (for example for

wheelchair storage) and free passage between parked vehicles. The minimum width should be at least 2700mm. Where it is not possible to access the footway directly from the vehicle, and wherever space is available, parking bays should be at least 3300mm wide in order to allow the driver or passenger to get out safely on the side where traffic may be passing. This is especially important in one-way streets because a disabled driver may have to get out of the vehicle on the "road" side. Bays must not be wider than

3600mm. Greater protection can be given to disabled people by marking out adjacent all-purpose bays and wider bays in a way which

Bays for disabled people may exceptionally be provided in the centre of the carriageway, but only if there is nowhere else within acceptable walking distance of an important facility (see Table 1). Where this is done, care should be taken to minimise the danger to disabled people from moving traffic. Bays provided in the centre of the carriageway must also be at least 6600mm long; they must be at least 3000mm wide but no wider than 4200mm (see TSRGD Diagram 1028.3).

provides a smooth transition from one to the other.

On-Street Parking at an Angle to the Kerb - Where space allows, parking bays may be at right angles or in echelon to the kerb. In this case, it is important that the bays are sufficiently wide to allow wheelchair access between adjacent vehicles. When designated by an Order under the Road Traffic Regulation Act 1984 bays must not be less than 4200mm long (see Figure 2 and TSRGD Diagram 1033).

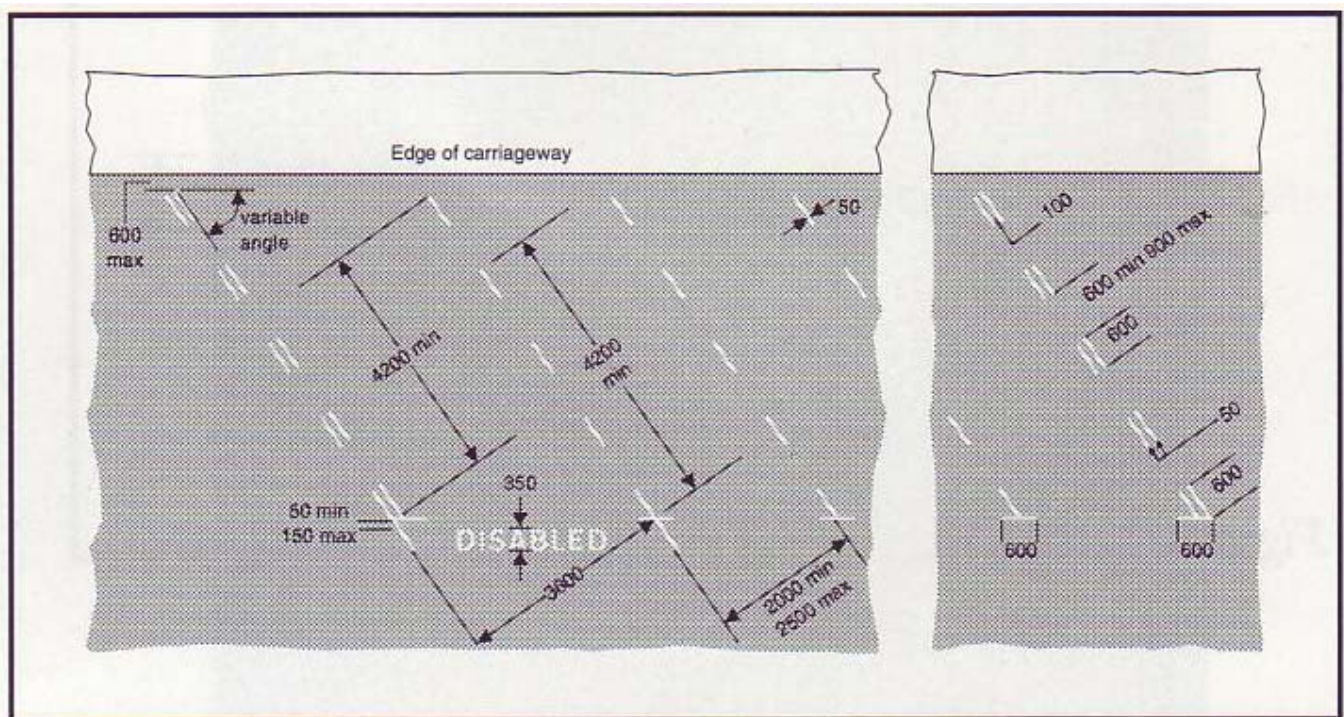


Figure 2

Pedestrianised areas -In pedestrianised streets which allow access by disabled people's vehicles, there will often be competing claims on limited road space, for example loading areas and bus stops. The positioning of parking bays will require careful planning. All entry points should be clearly signed to deter other motorists (see also Local Transport Note 1/87).

If disabled people's vehicles are not allowed to enter a pedestrianised area, bays for disabled people's vehicles in neighbouring streets should not be further from major destinations (bank, supermarket, etc) than shown in Table 1. Resting places maybe needed if the recommended criteria cannot be met.

Off-Street Parking - The dimensions of off-street parking bays should provide a rectangle at least 4800mm long by 2400mm wide for the vehicle, along with additional space as follows:

- (a) where the bays are marked parallel to the access aisle and access is available from the side, an extra length of at least 1800mm (Figure 3), or
- (b) where the bays are marked perpendicularly to the access aisle, an additional width of at least 1200mm along each side. Where bays are adjacent, space can be saved by using the 1200mm "side" area to serve the bays on both sides (Figure 4).

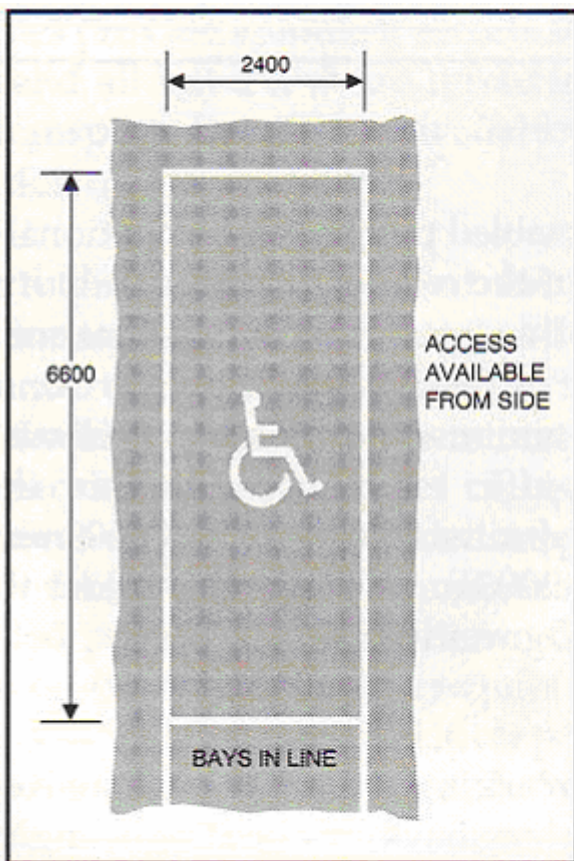


Figure 3

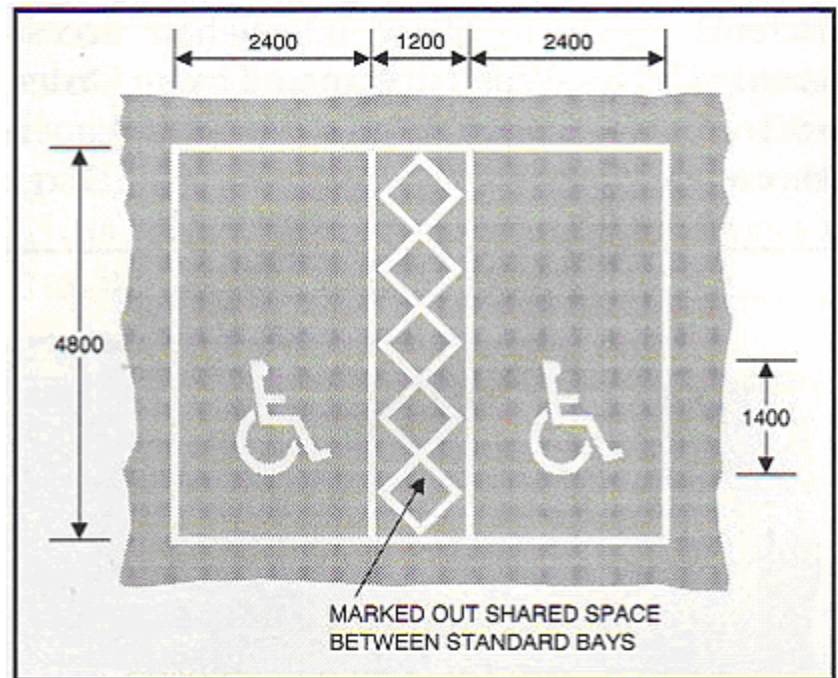


Figure 4

Other Design Considerations

Steps, Ramps, Bollards and Lifts - Pedestrian routes to and from car parks with bays for disabled people should be free from steps, bollards and steep slopes which many disabled people find difficult to negotiate.

Where steps are necessary, they should have edges with a strong colour contrast and be well lit. Pedestrian ramps should also be provided; they should be short, preferably with gradients no steeper than 5 % but in any case should not exceed 8%. These gradients also apply to any sloping pathways in the car park. Handrails should be provided on both sides of ramps and steps. Further details are available in "Reducing Mobility Handicaps".

Where the vertical distance is too great for a ramp, lifts may be used but they must have automatic doors. Access ways should be wide enough for all lift users and seats should be provided close to lift entrances for those who are unable to stand for long periods. Waiting areas should be well lit. It is essential that lifts are well

maintained and reliable. More details about lifts and associated facilities are set out in "Accessible Public Transport Infrastructure" published by DOT.

Dropped kerbs - flush with the road surface ease access to footways from parking areas. Their location should protect the interests of blind and partially sighted pedestrians; for example, dropped kerbs should not line up with entrance to buildings visited by the public.

Crossfalls - Provided drainage is not compromised, crossfall should not be steeper than 2.5% to aid off-loading of wheelchairs at the side and rear of vehicles.

Signs and Road Markings:

Signs to Designated Parking areas - On-street or off-street parking bays for disabled people may be indicated on directional signs and services signs. The white wheelchair symbol in a black square as shown in TSRGD Diagram 2113 should be used; an example is shown at Figure 5.

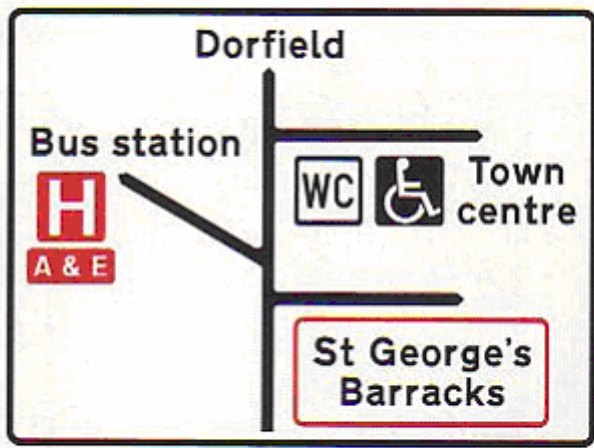


Figure 5:



If space allows, the white 'P' symbol in a blue square (TSRGD Diagram 2113.1) should also be used.

At car park entrances, clear signing should show that bays are provided for disabled people. Some types of variable message sign may be able to show whether bays for disabled people are available. Signs should also show details of time limits which may apply to disabled people, the method of payment, and the tariffs for disabled people, including a zero charge if applicable.

Visual intrusion can be caused by too many signs, especially in pedestrian areas. Overloading signs with too much information should be balanced with the need to clearly indicate the car parks where bays are provided for disabled people. Where names of car parks are shown approximate distances should be included. Posts carrying signs should be located so that they are not dangerous to blind and partially sighted people.

On-street signs and markings - Except on those lengths of road subject to Priority (Red) Route controls in London, signs at on-street bays should comply with TSRGD. The sign to Diagram 661 (Figure 6) has been retained from the previous TSRGD (1981). For Wales, a bilingual form of this sign appears in "Traffic Signs (Welsh and English Language Provisions) Regulations and General Directions". The road markings previously prescribed in TSRGD (1981) to diagrams 1028.1 and 1033 have been modified to permit wider bays so that disabled people can get in and out of their cars more easily. For bays designated on or after 12 August 1994, road markings must conform to TSRGD Diagrams 1028.3 (Figure 1) and 1033 (Figure 2), and signs to Diagram 661 must be used in conjunction with these road markings.



Figure 6

Advisory bays are not backed by an Order, but can offer some flexibility for faster implementation where competition for parking space is comparatively low and there are no other parking restrictions. On the other hand they cannot be enforced and reduce respect for reserved parking bays. The Department of Transport does not recommend advisory bays and they are not included in TSRGD.



Figure 7



Figure 8

On Priority (Red) Routes in London, signs and associated road markings at dedicated places for Orange Badge Holders on those lengths of road subject to Priority (Red) Route controls may currently only be used with the agreement of the Traffic Director for London. Examples of two of the signs are shown in Figures 7 and 8.

Orange badge holders may park in any of the red or white parking boxes for an unlimited stay during the period indicated by the sign adjacent to the box.



Signs and Markings in Off-Street Parks - Bays should be marked with yellow lines and a yellow wheelchair symbol within the space. Access areas between parking bays should be hatched in yellow (Figure 4).

To aid compliance, confirmatory signs should be displayed on adjacent walls or on posts erected specifically for the purpose. Such signs are not classed as traffic signs and need not therefore comply with TSRGD.

Signs inside the car park should indicate the most convenient way to the main civic, business, shopping and recreational areas. Approximate distances should also be shown.



Parking Control Equipment

For most disabled people holding permits, payment for parking will only apply in off-street car parks, but in some London Boroughs disabled people may be required to pay for parking on the street. Tariffs applying to disabled people should be made apparent, and instructions should be clear and easy to follow.

Parking control equipment should be placed at a suitable height for disabled people to see and use them. Tests undertaken for the Automobile Association, and published in a report "Mobility for All", show that a suitable height for coin slots, controls, displays and instructions is between 1000mm and 1400mm above the surrounding ground. The "surrounding ground" does not include any plinth on which the machine is mounted.

Parking meters, pay & display ticket machines, and barrier controls should be designed and installed according to specifications set out in the appropriate Part of British Standard BS6571:1989.



Parking Meters - The British Standard for clockwork parking meters (BS6571:Part 1:1989) requires that coin slots are located between 1100mm and 1300mm above the surrounding ground level. The Standard for electrically powered parking meters (BS6571:Part 2:1989) requires that all variable displays, slots for coins or tokens, and external controls are located between 1000mm and 1400mm above the surrounding ground. Where possible, plates showing tariffs and instructions should be fixed to the meter on the same side as the coin slot.



Pay & Display machines - installed to the specification in BS6571:Part 3:1989 should have slots for coins, tokens and cashless devices within the range 1000mm-1400mm. Variable displays and instruction plates would have to be lower than the maximum height allowed by the Standard (1700mm for variable displays and 1800mm for instruction plates) in order to be clearly visible by people in wheelchairs.

The Standard also requires that plinths do not protrude more than 200mm from the front face of the machine; the operator will thus be on the lower level surrounding the plinth.

Where machines do not issue an individual ticket, it is sometimes difficult for disabled people to separate their ticket from the ticket roll. Local authorities should ensure that machines are installed and maintained so as to ensure that tickets can be separated as specified by the BS6571:Part 3:1989.



Barrier Controls - Manual controls, the coin entry slot, and the ticket issue on barrier control units should be between 1000mm and 1300mm above the ground, as required by BS6571:Part 4:1989. Instruction plates should be placed at the lower end of the range (1000mm to 1600mm above the ground) required by the Standard.

Many disabled drivers find barrier control units difficult to reach. Where flat-rate tariffs apply and security is sufficiently good, coin bins similar to those which operate barriers at highway toll booths or river crossings may help. Control units operated by the insertion of a card should be located sufficiently close to the driver's window so that all drivers can reach the unit comfortably. Barrier control unit plinths should not protrude more than 200mm beyond the front face of the machine.

Pay-on-Foot - Similar considerations to those for pay and display ticket machines apply to the installation of pay-on-foot machines.

Other Forms of Control - Where space is limited, on-street parking control equipment can obstruct the footway. Other forms of parking control, such as vouchers, may provide a suitable alternative.



Enquiries:

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References:

- Department of Transport: "The Orange Badge Scheme", DOT leaflet, London, March 1992
- Parking Committee for London: "Information for Orange Badge Holders", Parking Committee for London, 1994
- Institution of Highways and Transportation: "Reducing Mobility Handicaps", IHT, London, 1991
- National Association of Shopmobility, Unit 35, Octagon Shopping Centre, BURTON-ON-TRENT, Staffordshire, DE14 3TN
- Traffic Director for London: "Network Plan", Traffic Director for London, March 1993.
- "Traffic Signs Regulations and General Directions 1994": SI 1994 No.1519, HMSO, London, 1994

- Traffic Signs (Welsh and English Language Provisions) Regulations and General Directions 1985: SI 1985 No 713
- Department of Transport: "Getting the Right Balance", Local Transport Note 1/87, DOT, London, 1987
- P Barham, P Oxley & T Shaw: "Accessible Public Transport Infrastructure", DOT, London, 1994
- Automobile Association: "Mobility for All", AA, Basingstoke, 1992

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