

4.2.1 Motorcycle parking specifications and examples

Motorcycle parking must be included within all new developments, according to the specifications set out in Manual for Travel Plans. Motorcyclists require secure and convenient places to park at key destinations such as employment and retail developments, education establishments, health, and leisure facilities as well as at transport interchanges (including Park & Ride sites) and in town centres.

Table 8. Motorcycle parking requirements

Characteristic	Description
Location/Design	<ul style="list-style-type: none"> All developments must include formalised parking on convenient sites in close proximity to centres of attraction such as building entrances (within 10m). Provision must be well-lit, level, well-drained, sheltered and free from debris with a non-slip surface that is hard enough to support the weight of a motorcycle resting on its stand. Motorcycle spaces must be protected (e.g. by bollards) from use by other vehicles, deliveries, bins etc.
Signage	<ul style="list-style-type: none"> Signing from the main routes and on-site must be included to reduce the likelihood of informally parked bikes causing a hazard. Spaces themselves must be clearly marked and signed.
Security	<ul style="list-style-type: none"> Motorcyclists must be given formal opportunities to park close to their destination in a covered off-street area where they can lock their machine to an immovable object (such as a rail, hoop, retractable ground anchor, or post) and where it can be kept under observation (directly or through CCTV) to minimize the risk of opportunistic or planned theft.
Access	<ul style="list-style-type: none"> Riders require adequate space to manoeuvre and a safe and legitimate means of access.

Table 9. Land-use specific requirements for motorcycle parking

Land-use	Requirements
Residential	<ul style="list-style-type: none"> Motorcycle parking within the curtilage of a property: <p>For houses with curtilage car parking, motorcycle parking space should be provided usually either in a garage or as hard standing in front of a garage, or just hard standing with direct access from the highway. Otherwise, motorcycle parking could be either a shed of sufficient size in the back garden or space for a shed of sufficient size in the back garden or a back garden of sufficient size with good rear access and turning space; in the case of the latter three, access is crucial. The majority of motorcycles are owned by people who also own cars, and parking them in the road if access to the back garden can be particularly problematic in terms of damage and security.</p> <p>It is desirable for a proportion of all properties to provide dedicated locking points within the curtilage of their grounds such as ground-level locking points</p>

Land-use	Requirements
	<p>to appeal to motorcycle owners. This is particularly important where residents are less likely to be owner-occupiers, therefore less able to make the physical alterations that a homeowner might consider.</p> <ul style="list-style-type: none"> Motorcycle parking outside the curtilage of a property: <p>Communal motorcycle parking space must be provided where there is no private car or motorcycle parking provision (e.g. flats), to avoid problems caused by nuisance parking.</p>
Long-stay (e.g. employment, education)	<p>The highest use of motorcycle parking facilities is observed in long-stay locations including large machines at office-based employment developments.</p> <p>Security is important and locker and changing facilities are needed inside premises.</p>
Short-stay (e.g. retail, leisure, health)	<p>Motorcyclists using bikes to shop at supermarkets require spaces close to the store with points provided for attaching locks.</p> <p>Lockers for helmets and/or protective clothing could be usefully provided at supermarkets and at larger/mixed retail developments.</p>
Transport Interchanges (e.g. railway stations)	<p>There is a need to ensure that an adequate number of secure and convenient spaces are provided. Lockers and helmet storage are also necessary. A high usage of motorcycle parking facilities can be observed at railway stations.</p>

- Motorcycle parking levels:**

Somerset's Countywide Parking Strategy (2005) sets minimum motorcycling parking standards in new developments at 'half the basic level of cycle parking'. For travel plan developments, provision should be related to the modal share targets in the travel plan. The level of motorcycle parking must not be less than one space per 20 car parking spaces or per 2 cycle parking spaces (whichever is the greater level of motorcycle parking). The British Motorcyclists' Federation suggests minimum motorcycle parking standards for different types of development.

Table 10. British Motorcyclists' Federation's minimum motorcycle parking standards

Description of Land Use	Minimum Motorcycle Parking Standard
Camping Sites	1/4 Staff, 1/10 Pitches
Marinas	1/4 Moorings
Car Parks	1/10 Parking Spaces
Park and Ride Sites	1/10 Parking Spaces
Rail Stations	10/Morning Peak Service
Bus Stations	4/1 Bus Bay
Key Bus Stops	4/Stop
Hospitals	1/4 Staff, 1/20 Beds

Source: BMF.

4.2.2 Cycle parking specifications and examples

Cycling is increasingly recognised for its role in reducing car use; a fundamental part of encouraging people to cycle is providing cycle parking in new developments and at any location where people can realistically be expected to cycle. 'The absence of secure, convenient cycle parking can be a serious deterrent to cycle use'¹⁶

This section provides guidance on the principles and standards which must be applied when providing any cycle parking through a planning application or travel plan to ensure that it is suitable for purpose and likely to be well used. Cycle parking should be approached with the same attention to detail as all other parts of a development project.

Table 11. Cycle parking requirements

Characteristic	Description
Location/Design	<p>Parking should be sited close to the building entrance, particularly for short term parking, in an area that feels safe to use both day and night for all potential users. It should be easy to get to without detours and must be accompanied by lowered kerbs to allow easy use without the need to drag or lift the cycle.</p> <p>The type of stand provided must be suitable for effectively securing the bike by the frame as well as the wheels. The simplest, most effective and preferred type of cycle parking is the basic Sheffield Stand design¹⁷, comprising a metal hoop sunk into concrete or bolted to the ground, ideally with the addition of a lower horizontal bar to secure smaller bicycles. These form the basic standard of cycle parking required. All stands must be made of robust materials and fixed securely to the ground. Stands which can only be used to secure the front wheel are never acceptable. These and other types of stand that are specifically not accepted are included in Appendix X¹⁸.</p> <p>Cycle parking should be suitable for its surroundings and intended use. The need for covers or canopies and further specifications are set out in Table 12 below.</p> <p>The stands themselves must be spaced to allow users all access all the stands without scratching or tangling their bicycle with neighbouring bikes. See Table 12 below.</p>
Security	<p>The type of stand used must enable the wheels and the frame of a bike to be locked to the stand. Natural surveillance and CCTV increase perceived security and reduce the likelihood of theft or vandalism. Signs indicating that the area is under CCTV surveillance will also help to deter thieves, though natural surveillance (e.g. by siting the stands in busy, open areas) is preferable.</p>

¹⁶ Department for Transport (2008), LTN 2/08 Cycle Infrastructure Design

¹⁷ Transport for London's guidance ('Workplace cycle parking guide') provides a review of many cycle parking styles, and lists those 'not recommended' as (pp12-13): two-level wheel or handlebar racks; two-level upright racks; 'butterfly' racks; railings or street furniture; wheel slots in concrete

¹⁸ These include drainpipes, railings, front gardens, and specific types of cycle rack/stand

Characteristic	Description
	<p>If the parking area is likely to be used after dark, the parking area and the route between the cycle parking and building entrance must be adequately lit to ensure people feel safe accessing their bike after dark.</p> <p>Compounds can be made very secure with access controlled by swipe cards or keys. This may be necessary for long-term parking in unsecured areas e.g. office compounds/residential stores, or where there are vandalism/theft problems. The design, ergonomics and location of the compound is also important as an unattractive, poorly lit compound will put people off using it and render the facility ineffective. Such proposals will not be accepted as part of a travel plan.</p>
Access	<p>Cycle parking should never form an obstruction to pedestrians. It must comply with the Disability Act 1995 and meet local health and safety requirements.</p> <p>All users must be able to access the cycle parking easily, regardless of age or physical capabilities. This is especially important where the facilities are likely to be used by more vulnerable users e.g. children, elderly people, parents transporting small children or disabled users of specialist cycles.</p>
Signing	<p>Cycle parking facilities must be easy to find, clearly signed and sign-posted. Signage in 'house style' can demonstrate corporate commitment to sustainable travel.</p> <p>For long-term parking e.g. at office or residential sites, information about management of the premises and security arrangements may be of use.</p>

The first thing to consider is who will be the primary users of the parking that you are providing. This will help to determine the type of parking to provide.

Table 12. Land-use specific requirements for cycle parking

Duration of stay	Requirements
<p>Short term (up to two hours) e.g. shops, public facilities, banks, post office, doctors surgeries</p>	<p>Close (5-20m) to destination but not obstructing footways or access.</p> <p>Adequate supply of secure stands (Sheffield design as basic standard).</p>
<p>Medium term (two hours to five hours) e.g. leisure facilities, large shopping centres, education establishments</p>	<p>Close (5-30m) to destination.</p> <p>Sheltered with a canopy, cover or building.</p> <p>Good natural surveillance and lighting.</p>

Duration of stay	Requirements
<p>Long term (over five hours) e.g. residents, employees, commuters</p>	<p>Reasonable distance from entrance (10-20m for residents, and 10-50m for employees/commuters)</p> <p>Must be enclosed and secure. Long term parking for staff or visitors, particularly where bicycles are likely to be left overnight or there is a risk of vandalism or theft, must be in a lockable enclosure or within a building with no public access.</p> <p>Lockers, showers and facilities to store and dry outdoor clothes must be provided (see section 3.1.2 above).</p> <p>Residential Cycle Parking:</p> <p>The type of dwelling will dictate the type of cycle parking that can be provided. Cycle parking should be integrated into the design and structure of buildings. It will need to be provided at a basis of 1:1 per bed (rather than dwelling), to enable storage of more than one cycle if more than one person is likely to be living in a dwelling.</p> <ul style="list-style-type: none"> ● Cycle parking within the curtilage of a property: <p>Cycle parking may be provided either within the body of the building (e.g. porch) or in a secure shed, garage, outhouse or locker.</p> <p>If within the building, the cycle parking must be accessed easily without cycles needing to be carried or dragged for long distances, through the living areas of the house or up/down steps.</p> <p>If provided in a separate building (e.g shed), this must be built of robust materials, be lockable (or dedicated securing points provided inside) and either of sufficient size to enable bicycles to be easily manoeuvred inside (at least 2m depth) or of a custom-made design for storing bicycles.</p> <p>If the storage is to be provided at the rear of the property, there must be rear access of at least 1.5m width. .</p> <p>If cycle parking is to be provided within a garage also intended for car parking, additional space for the bicycles must be provided. There must be at least 1.5m access between the side of the car and the wall of the garage through which to manoeuvre bicycles. [Securebydesign reference]¹⁹.</p> <ul style="list-style-type: none"> ● Cycle parking outside the curtilage of a property:

¹⁹ <http://www.securedbydesign.com/pdfs/newHomes2009.pdf>

Duration of stay	Requirements
	Communal cycle parking space must be provided where there is no private provision (e.g. flats), to reduce the risk of theft. This must be fully enclosed and secure (e.g. a compound) with good access and separate from bin stores and motorcycle parking spaces. A management and maintenance regime should be included if a lockable enclosure is to be provided (e.g. using key-operated, keypad or electronic access) to ensure continued, convenient use into the future.

Figure 6. Example of medium-term cycle parking solution



Figure 7. Example of long-term cycle parking solution



- **Cycle parking levels:**

Cycle stands must be provided to a minimum level calculated by Countywide Standards and the number of people expected to be cycling.

Further guidance on levels of cycle parking is provided in Somerset County Council's Manual for Travel Plans.

- **Detailed Design Dimensions:**

A conventional bicycle is 1800mm long by 650mm wide. Cycle parking must be laid-out appropriated to allow all spaces to be useable. Increasingly cycles with tag-along child bicycles, child buggies, cargo-style bicycles and styles such as recumbents and tricycles are used; these should all be taken account of.

Table 13. Bicycle dimensions. For the footprint for a bicycle when parked please see Figure 8.

Type of cycle	Length (mm)	Width (mm)
Conventional Bicycle	1800	650
Bicycle and 850mm wide trailer	2700	850
Bicycle and 'tag a long'	2750	650
Tandem	2400	650
Conventional Bicycle + cyclist pushing it	1800	1200

Figure 8. Cycle parking spacing requirements

When designing cycle parking the above dimensions should be borne in mind along with the need for a cyclist to easily and conveniently manoeuvre their bike into and out of a bicycle stand, i.e. their swept path and turning spaces must be provided for.

An important consideration is the space required to access a free stand and turn your bicycle at a right angle to place your bike in the stand. Cyclists should not have to lift or drag their bikes to access parking. Research has shown²¹ that a minimum aisle width of 2 metres is required to turn a bicycle through 90 degrees (shown in Figure 8 which provides guidance on the spacing and layout of cycle parking).

- Additional Considerations

Doorways:

To access cycle parking cyclists may need to be able to push their bike and open the door at the same time. The average width of a cyclist pushing a bike is approximately 1200mm. Doorways should ideally be a minimum of 1300mm with 1500mm preferred to enable cyclists to pass through without knocking the bike on the door frame.

When opening a door a cyclist needs to stretch to open the door and then hold the door open whilst passing through with their bicycle (if the doorway is not, as is preferable, mechanically or electrically assisted). This can be particularly problematic if doors are spring loaded to close automatically. If there are consecutive doors the building layout must take account of the space need by cyclists with bikes to negotiate these easily; 3.5m between doors is a suggested minimum.

²¹ Alex Sulley, Residential Cycle Parking Guide (draft), July 2008
