

# Swindon Cycle Parking Design Guide

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# 1.0 Introduction

This cycle parking design guide provides essential information for property developers, urban designers, architects, civil engineers and planners. It explains why cycle parking is important [section 2.0] and the key principles underpinning cycle parking provision [section 3.0].

It seeks to provide technical solutions appropriate to specific scenarios that support all cycle users when planning for new development. It should be read alongside Swindon's adopted Parking Standards for New Development to provide further clarity on acceptable design standards.

Specifications are provided for "Sheffield stands" – one of the most basic, but also one of the most effective forms of cycle parking – along with other related designs of stand. Diagrams show how to fit and to space stands correctly, and make access clear and easy [section 5.0].

Stands in rows or clusters are an acceptable way to provide short-stay cycle parking, but in locations where bikes are parked for longer periods additional security and weather protection is required. Various forms of lockable enclosure are described and explained [section 6.0].

Section 9.0 lists designs of cycle parking that are not considered good practice and that are not approved for use.

Section 10.0 lists various types of development, and the various forms of cycle parking that are acceptable.

Cycle parking should never be an "add on": it should be an integral part of any development. Designers should aim to make access to cycle storage at least as convenient as access to car parking. By following the guidance in this document costly mistakes may be avoided and developers can be confident that they are fully discharging any requirements concerning cycle parking required by the planning process.

## 2.0 The importance of cycle parking

**Good quality cycle parking is important for three key reasons:**

### Crime prevention

Cycle parking stops bikes being stolen. Cycle theft is a nationwide problem with up to half-a-million bikes being stolen every year. Much of this is opportunistic and can be prevented by the provision of an appropriate quantity of good quality cycle parking in prominent locations.

### Cycle promotion

The availability of parking makes cycling easier and more enjoyable. This, in turn, encourages more cycle use which, in turn, reduces motor traffic, eases congestion and makes the urban environment more pleasant for everyone.

### Good design

Well designed, attractive facilities can enhance the appearance of an individual building, a street or an entire area. Cycle parking can boost economic activity by making it easier for people to visit and use local shops and other businesses. Cycle parking can help keep an area tidy by deterring people from locking their bikes to railings or benches or bringing them into buildings where they may be a nuisance or hazard.



## 3.0 Principles of cycle parking

**All cycle parking installed by developers should adhere to the following principles:**

### Easy to find

Cycle parking should be located in prominent locations where it is easy to see and to reach. If the parking is in a less-than-obvious location it needs to be clearly signposted.

### Easy to access

Parking should be located as near as possible to the cyclists' destination (generally, within 30 metres). If the cycle parking is intended to serve a particular building it should be close to the main entrance. If more than one entrance is used, parking should be provided at each one. The cycle parking should be easy to reach without having to negotiate tortuous one-way systems across car parks, lengthy detours, steep ramps or steps/stairs.

For residential cycle parking, this means that storing bicycles in bedrooms or hallways is not acceptable. Cycles should not have to be taken through more than one door nor carried up or down stairs or steps.

### Easy to use

Cycle parking should be of a type that is easy to understand and to use. It should accommodate all types of cycle, including small-wheeled bikes and children's cycles. Provision should be made for non-standard cycles such as tandems, tricycles, cargo bikes and bike trailers. Stands should be well laid out with ample space between them. Avoid types of parking that require bikes to be lifted or up-ended.

### Secure

No one will use a cycle parking facility if they think their bike is likely to be tampered with or stolen.

People will also be reluctant to use a parking facility if they feel personally unsafe. Cycle parking should be installed in locations that have a good level of informal surveillance: for example beneath a window or close to a busy reception area. If a site has CCTV, the cameras should be positioned to give a good view of the cycle parking. Lighting should be installed if a facility is likely to be used after dark. Fit high quality cycle stands that enable users to lock both the bike's frame and a wheel. Where bikes are likely to be stored for lengthy periods or overnight provide a lockable shelter, a gated compound, or cycle lockers.

### Plentiful

Provide sufficient cycle parking places to meet current demand plus some spare capacity to accommodate new cyclists. On large sites it is preferable to have small clusters of stands in a number of locations rather than everything in a single central point.

### Attractive

Cycle parking facilities should be well designed, welcoming and appealing. Choose a high-status location (the main entrance, the front of the building) rather than a low status one (behind the bins, the far end of the car park). Stands should be installed on solid surfaces (tarmac, concrete, paving slabs, etc), never on unsurfaced ground or on grass, because this rapidly wears down and becomes muddy and unpleasant. An appropriate monitoring and maintenance regime should be set up so that the cycle parking is checked regularly, cleared of litter and other debris (sometimes this will include abandoned bikes) and any faults or defects repaired promptly.

# 4.0 Spatial requirements

Successful cycle parking has three key components: the route, the parking space and the locking point.

The route leading to and from the parking space. This should be wide enough to enable easy access. Ideally, cyclists will be able to ride their bikes all the way, but facilities that require people to dismount and wheel their bikes to the parking bay are acceptable if there is enough room for bikes to be manoeuvred into place without difficulty.

A standard cycle is typically 650-700mm wide depending on handlebar width. However, when the rider has dismounted and is alongside the bike, wheeling and manoeuvring it, the effective width increases significantly.

Access routes should be a minimum of 1100mm wide. More space will be required if the route includes obstructions or tight turnings.

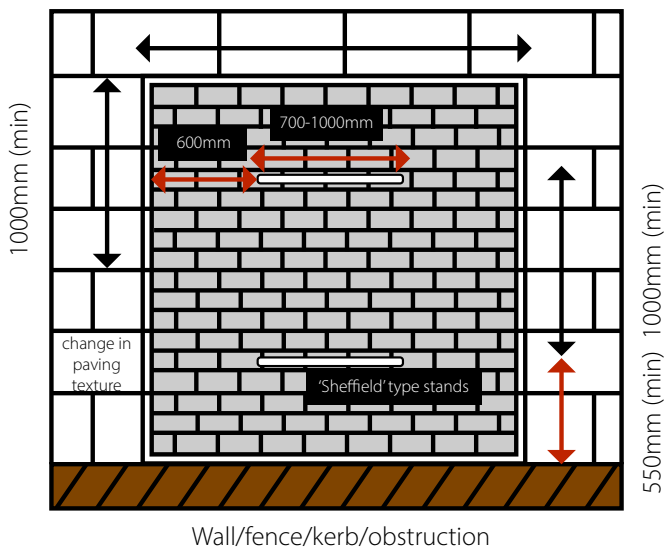
In larger cycle parking facilities, where stands are installed in parallel rows with aisles in between, more space will be required: at least 1800mm per aisle. In busy facilities with 20 or more stands on each side of an aisle, where two-way flows of cyclists pushing their cycles are likely at peak times, aisle widths should be increased by at least 500mm.

Where parking for cargo bikes and other non-standard cycles is included aisles should be at least 3000mm wide. See also section 7.0 below.

## The parking space.

A standard cycle requires a space 2000mm long by 500mm wide. There should also be enough room for users to manoeuvre their bikes in and out of the space without difficulty, lock or unlock them, and remove or attach any luggage or accessories such as lights.

Cycle parking stand 'footprint' (plan view)



## The locking point.

This is typically a stand or rack to which cycles are secured. There are many different designs available, in a variety of materials and colours. The essential requirement is that the stand or rack is sturdy and immovable, supports bikes properly, and enables a lock to be threaded through at least one of the wheels and the bike frame.

Developers are advised to be cautious when viewing manufacturers' catalogues or talking to salespeople! As well as producing some excellent products some companies persist in producing and marketing types of cycle parking that do not meet modern day needs and that are not approved for use by this cycle parking standard. Guidance is given below.

# 5.0 Approved types of cycle parking – stands and racks

## 5.1 The Sheffield stand

Named after the city where they were first used, Sheffield stands are now the nation's default cycle parking stand. They are approved by all UK local authorities, all cycling organisations, and are preferred by most cyclists. As well as being one of the best forms of cycle parking, they are also one of the simplest and cheapest. The stand is formed from an "n" shaped steel tube. Each stand supports two bicycles. Cyclists simply lean their bikes against the stand and then secure both the frame and a wheel using a D-lock or cable lock.

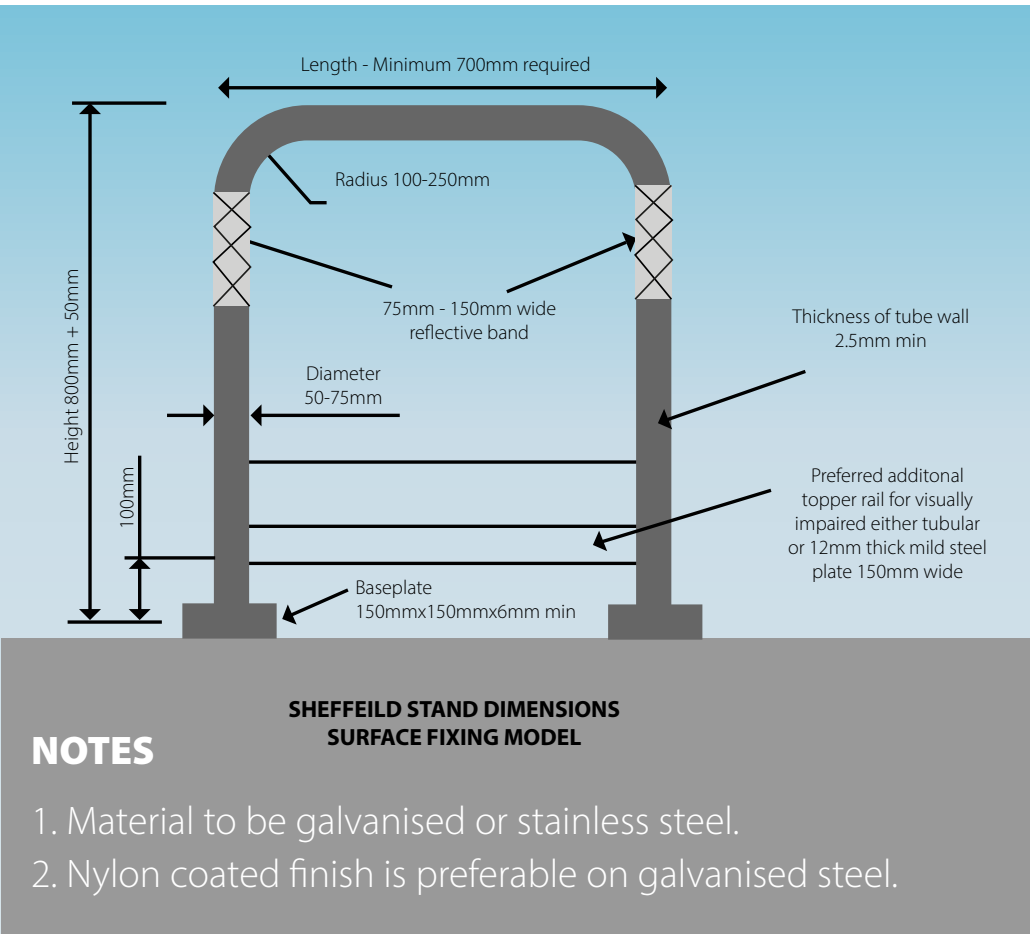
### Key dimensions are:

**Length - Minimum 700mm required** Shorter stands do not provide sufficient support and bikes may topple over.

**Height 750mm (+/-50mm).** Lower stands do not support bikes properly and they may topple over. Taller stands offer fewer locking options.

**Tube diameter 50-90mm.** Cyclists will not be able to fasten their D-locks around tubes with a broader diameter.

**Corner radii 100-250mm.**





**Sheffield stands** are available in two different forms: those that are anchored by being sunk into the ground (called root fixing or sub-fix) and those that are bolted down.

**Sub-fix stands** should be embedded to a depth of 300mm and concreted into place. This is the preferred type of stand.

**Bolt down stands** have base-plates at the foot of each post and are fixed to the ground using expansion bolts, usually two per base-plate. Bolt down stands are only suitable for fastening to a solid concrete surface; they should never be used on tarmac, slabs, block paving or other types of surface as the bolts will work loose or crack the paving if the stand is rocked. Bolt down stands have a further disadvantage of being vulnerable to thieves or vandals undoing the bolts.

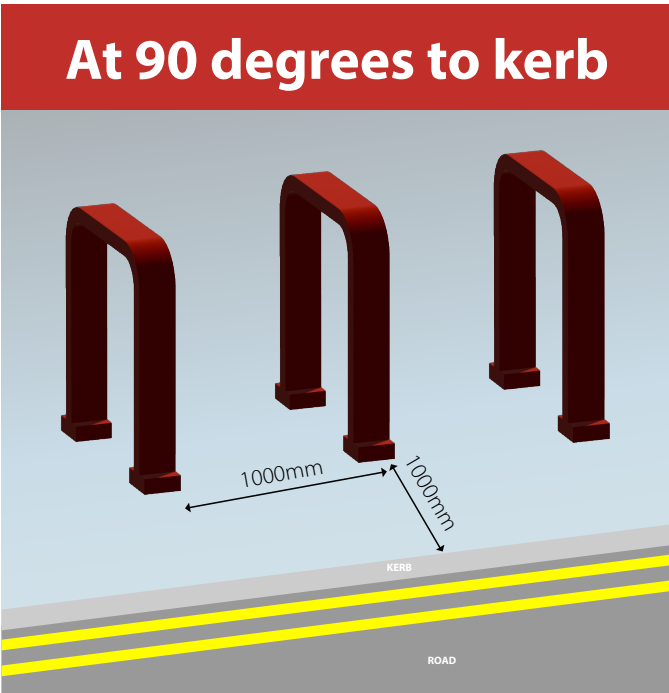
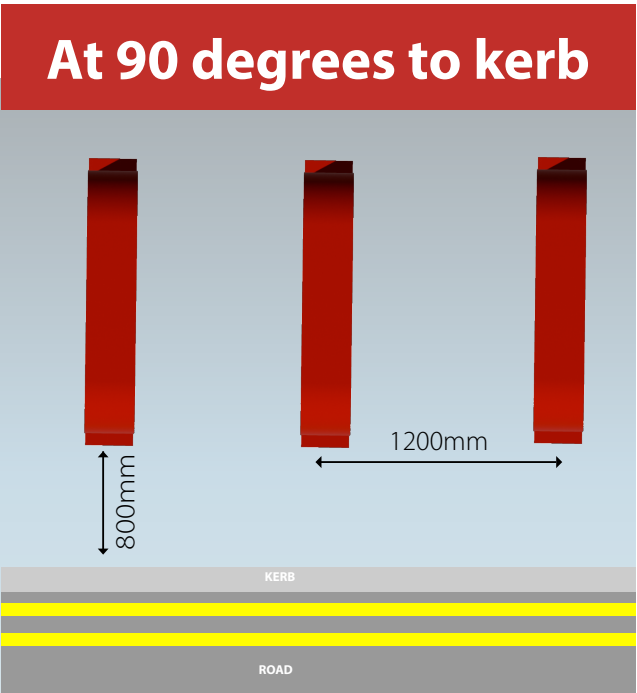
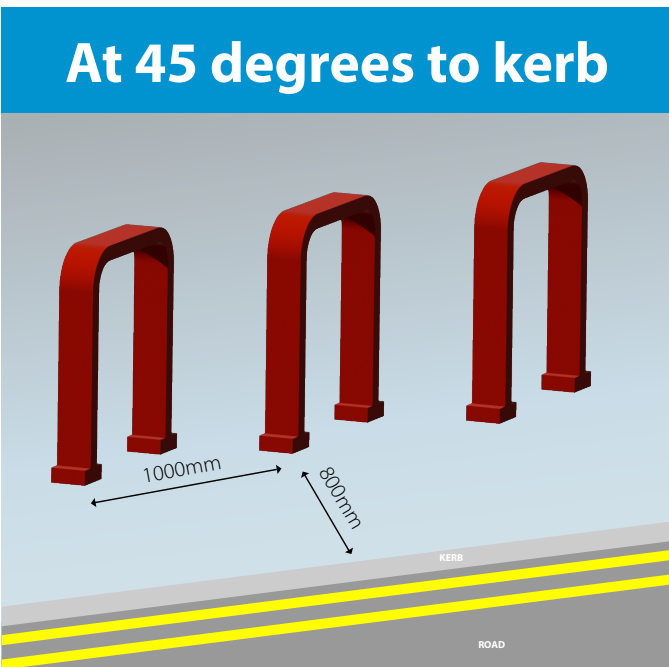
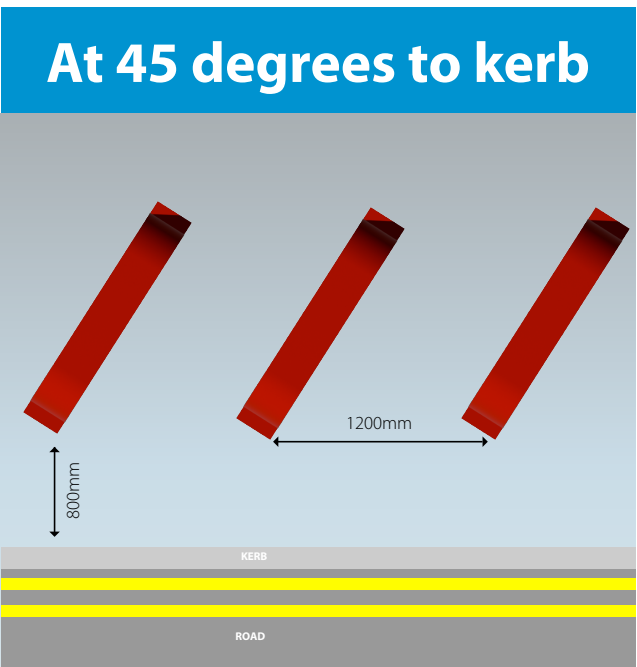
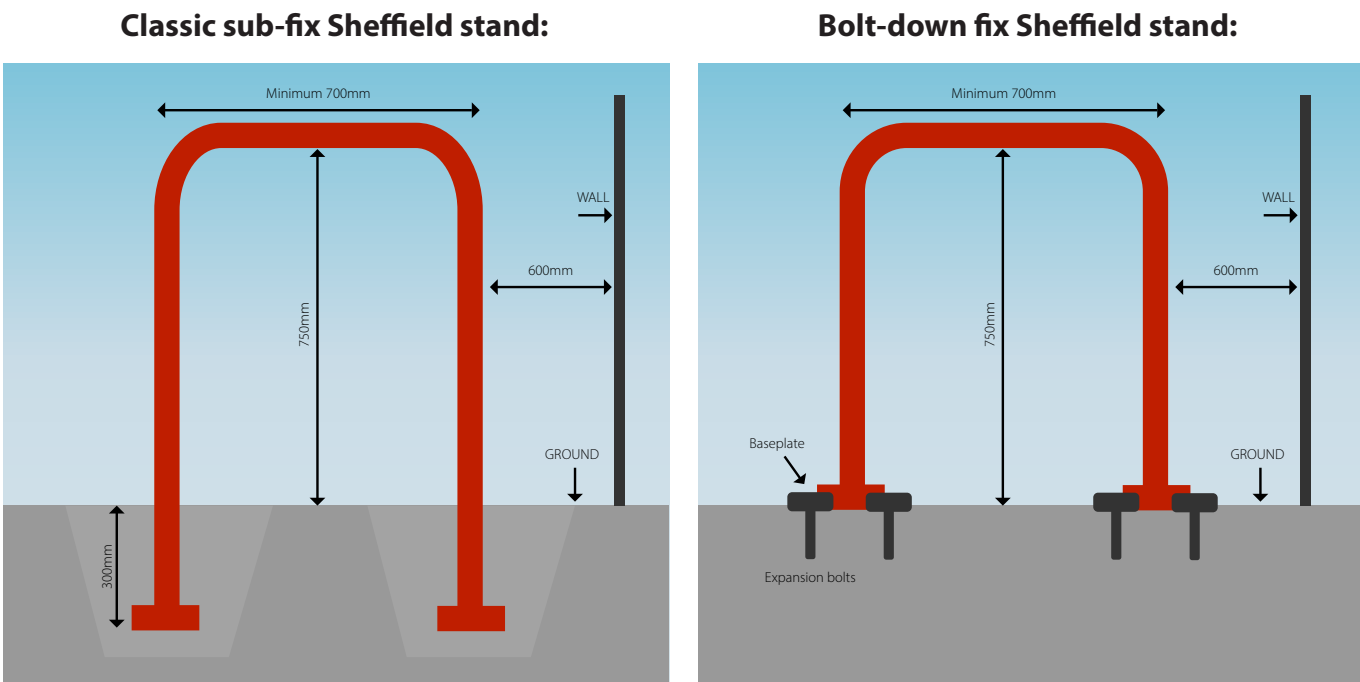
Sheffield stands are made either from mild steel or stainless steel. Mild steel versions are the cheapest. They will be protected from rusting either by being galvanised, powder coated or covered with a plastic or resin coating that also protects bikes from being scratched. The coatings are available in a range of colours enabling stands to match corporate colour schemes.

Stainless steel Sheffield stands are more expensive than mild steel but have the advantage of being maintenance free and very long-lasting. They will not rust or tarnish, and many people find the silver finish very attractive. They are a high-quality product and can enhance the visual appearance of a development.

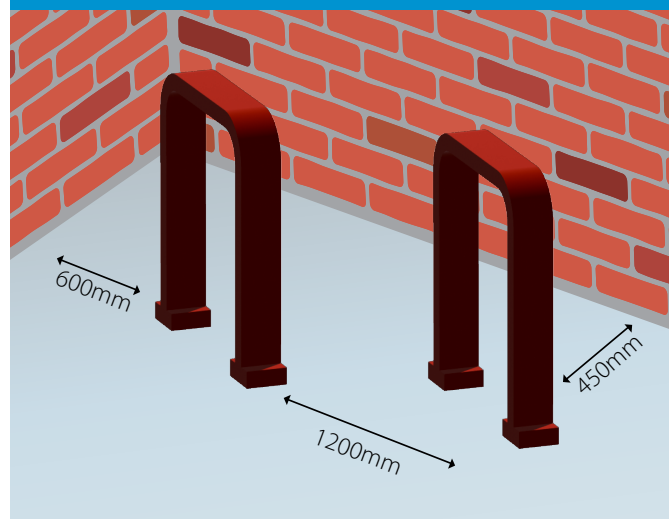
It is essential that Sheffield stands are spaced correctly. This is quite easy to achieve but instances of incorrect installation abound. The mistakes most often made are to cram stands into small spaces, to install them too close to a wall or a kerb, or to place them in locations where the stands, and bikes fastened to them, are vulnerable to being damaged by passing vehicles.

Bikes are typically 1800mm long, so adequate space both to accommodate and manoeuvre the bike should be given.

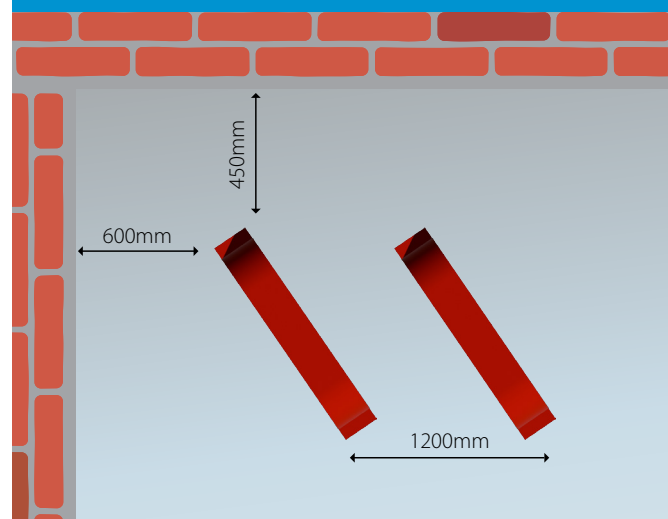
The diagrams below shows how to install and space Sheffield stands correctly.



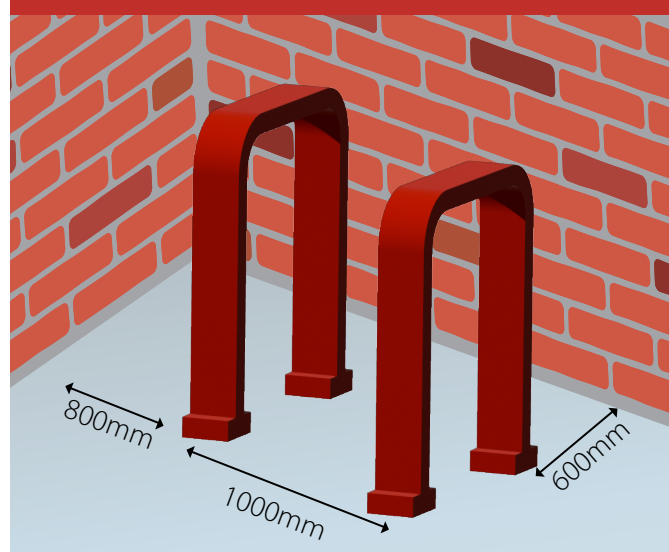
### At 45 degrees to kerb



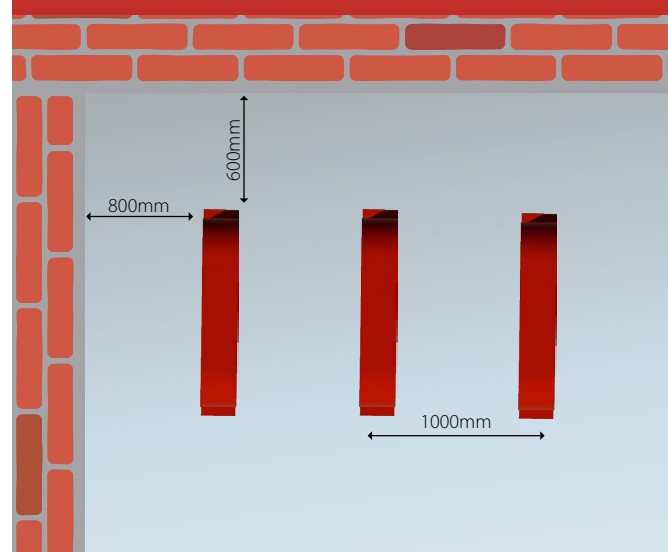
### At 45 degrees to kerb



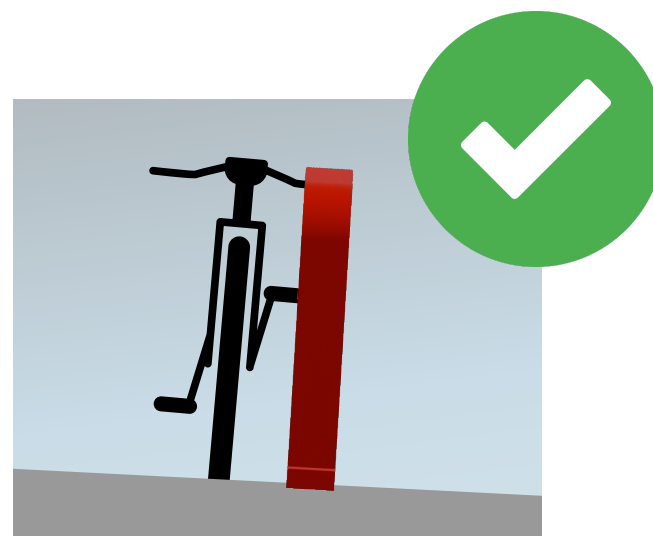
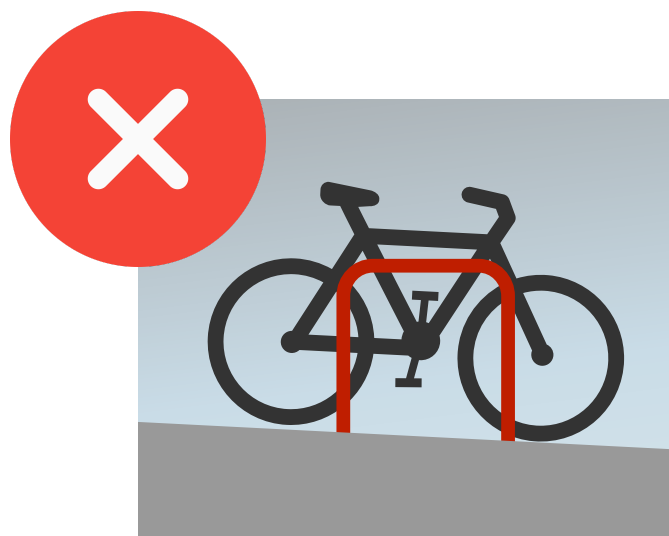
### At 90 degrees to kerb



### At 90 degrees to kerb



Stands should be installed on level ground. A slight slope is acceptable, but in such circumstances the stands should be aligned at right angles to the slope to prevent bikes from rolling away.



## 5.2 Sheffield stand variants



Manufacturers have reinterpreted the basic Sheffield stand design in many different ways, some more successful than others. The essential requirement is that the stand supports bikes properly and enables a lock to be threaded through one of the wheels and the bike frame. Some of the better Sheffield stand variants are listed below together with other forms of cycle parking that are approved for use.

## 5.3 Toastracks

A number of Sheffield stands may be linked together by horizontal rails or steel strips at ground level. The resulting device is known as a toast-rack. As with regular Sheffield stands, the stands should be one metre apart. Toastracks can be left free-standing as a way of providing temporary cycle parking; if they are intended to be permanent the units should be bolted down using security bolts or ground anchors. Toastracks may sometimes be approved for use in conservation areas (see section 11.0).





## 5.4 Stand with additional central tube

This is identical to the Sheffield stand but with an additional horizontal tube or bar (often called a “tapping rail”) close to ground level that blind and visually impaired people can locate if using a white stick.

Stands of this design are extremely versatile. The low central tube:

- is helpful for visually impaired people
- enables all sizes of cycle to be secured including small-wheeled bikes and children’s cycles
- can also be used for parking larger, non-standard types of cycle (see section 7.0).



## 5.5 Stand with central plate

This is more distinctive version of the Sheffield stand. It has fluorescent bands and a horizontal plate or panel that blind and visually impaired people can locate if using a white stick. The panel may also display a parking symbol or other logo.

Stands of this type are often installed at the start and end of rows of Sheffield stands as a way of making the facilities more obvious and pedestrian-friendly.



## 5.6 Stand with sloping top tube

Stands of this shape accommodate both adult’s and children’s bikes. The slope prevents people climbing on to the stand.



## 5.7 CaMden stand

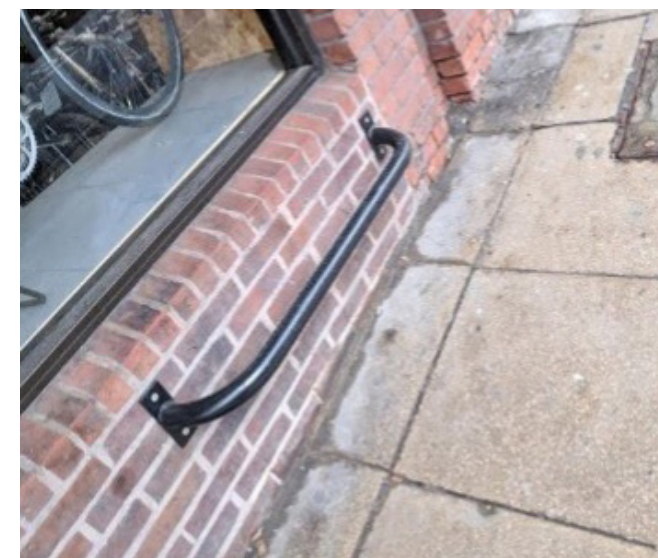
This is an award-winning design that enables the frame and both wheels to be secured easily. The dip in the top tube deters bike owners from simply locking the bike’s cross bar to the stand.



## 5.8 Wall-mounted

In places where there is insufficient space to fit stands on the ground wall-mounted cycle parking should be considered.

The most versatile are steel rails. Smaller loops or rings are also acceptable. They should be mounted 600mm from the ground. At this height it is possible to thread a lock through both the bike’s frame and a wheel. Wall-mounted cycle parking is not commonplace, so consider adding signs to indicate the presence of the facility.





## 5.9 Children's bikes and scooters

Many nurseries and primary schools encourage children to cycle or scoot to school, and parking or storage should be provided.

Scooter racks are available in single- and double-sided formations. They can be left free-standing and therefore moveable in areas where theft is not a problem, or secured to the ground or on the side of a wall for a more secure installation. Some designs include a lockable clasp.

Balance bikes such as the Like-a-Bike are a form of play equipment that gets young children used to balancing on two wheels. When the bikes are not in use, they can be placed in racks or be stored more securely in a lockable cabinet or locker.

Children's bikes can be parked and locked in exactly the same way as adults' bikes. Sheffield stands, wall-mounted rails and similar forms of parking are ideal. Many manufacturers supply stands in "junior" sizes

suitable for smaller bikes. Alternatively, Sheffield stands are available with a low bar fitted between the two uprights to which children's bikes can be locked (see section 5.4).



## 5.10 Two-tier racks



Several manufacturers produce wall-mounted or free-standing racks that store bikes on two or even three levels. They are useful in busy locations where there is substantial demand for cycle parking but limited space. Staffed locations, where someone can keep an eye on the facility and its users are preferable.

The lower level of a two-tier rack has a series of metal channels into which a bike is wheeled. A loop or rail alongside the channel provides a point to which the bike is secured with the user's lock. To access the upper level the user wheels or lifts their bike into a channel on a sloping ramp. The bike is locked, and then the ramp is raised and slid forwards. On well-engineered units the process is smooth and easy.

### Design

Two-tiered racks should allow at least one wheel (ideally both wheels) and the bike's frame to be secured.

Lifting should be facilitated by springs, counterbalancing, gas struts, or electric assistance.

Users should not have to lift their bikes more than 50cm from the ground to access the second-tier ramp. Ideally, the ramp should reach the floor so that the bike can be wheeled on without lifting.

Users should not have to raise the ramp and bike more than 135 cm to reach the parked position on the second tier.

### Spacing

If two-tier cycle parking units are installed indoors at least 2.6m of headroom will be required.

Racks usually have parking spaces on two different alternating heights to prevent handlebars clashing and to make loading easier.

The distance between parking spaces is important: the wider the space the greater the size of bike (and its accessories) can be accommodated. The standard distance between spaces is 375mm.

### Access and egress

Cyclists need room to manoeuvre their bikes in and out of the racks. A minimum aisle width of 2500mm is required for access to a single two-tiered rack. This increases to a width of 3500mm where there are racks on both sides of the aisles.

### Maintenance

Two-tier racks are relatively complex pieces of equipment and will require regular inspection and maintenance. Bearings, rollers, springs and struts, will need periodic lubrication and adjustment. In public places, the racks can be vulnerable to misuse and vandalism.

The use of two-tier stands is suitable for most developments, but only if Sheffield stands can't be accommodated."



5.11 Weather protection

Weather protection is always appreciated by cyclists, and for long-term cycle parking it is essential. Bikes stored outdoors are vulnerable to rust, and saddles and luggage tend to soak up rainwater.

It is sometimes possible to fit cycle stands under an existing awning or an overhanging roof. We require a clearance of at least 1200mm height in these circumstances. Alternatively, a canopy can be erected over the cycle parking, or the stands can be installed in an open-fronted shelter.



Three-sided shelters are preferable because they offer further protection from lateral gusts of wind and rain. They benefit from being installed so as to face the prevailing wind. Canopies and open-fronted shelters are available with clear, acrylic panels that give the cycle parking facility a light and airy feel. Alternatively, all-metal structures are a more robust option.

Canopies and open-fronted shelters do not, however, enhance security. They are not approved for residential developments or in places where long-term cycle parking is required.



|                      |  |
|----------------------|--|
| Type                 | Canopies and open-fronted shelters   |
| Purpose              | Weather protection for cycle stands.   |
| Approved for...      | Short-term use, for example, for shoppers using retail areas, employment sites and transport hubs. |
| Not approved for ... | Resident's parking.  |
| Pros                 | Low-cost. Popular with cyclists.   |
| Cons                 | None.  |

6.0 Approved types of cycle parking – lockable enclosures



The cyclist's first line of defence against theft is their own bike lock. But some thieves carry bolt cutters and power tools, and even the toughest locks can be forced or cut. A second lockable barrier is therefore a desirable measure, and in locations where bikes are parked for long periods or overnight it is essential. Bespoke lockable enclosures can be constructed, or prefabricated structures can be installed.

All lockable facilities require a management system to ensure that only legitimate users can gain access. The choice of locking mechanism is important. With old fashioned hasp-and-staple or padlock arrangements there is always the likelihood of keys being lost or misappropriated. Digital keypads are better although, again, there is the risk of access codes being passed on to unauthorised people. Electronic locks, opened by cards, tags or mobile phone apps are the most secure arrangement.

Space within lockable facilities is likely to be at a premium; so, when a person no longer needs a cycle parking space it should be reallocated to another user. Users sometimes develop bad habits: wedging doors open so that friends can get in, or storing more than one bike in the facility . This can be discouraged by regular inspections and by on-going education. A code of conduct that spells out essential do's and don'ts may also be helpful.

Enclosed facilities will also require regular cleaning and maintenance (see section 13.0).



## 6.1 Shelters.

There are many different designs of prefabricated cycle shelter available, in a variety of materials. Many manufacturers offer a planning and design service.

The key design considerations are:

**Location.** Shelters should be installed where they are easy to reach (see section 3.0).

**Size.** Shelters should be large enough to accommodate approved designs of cycle stand, correctly spaced, and with access aisles and doorways of the correct width (see section 3.0).

**Security.** The shelter must be robust and resistant to forced entry. The door, in particular, needs to be tough. Ideally, it should be self-closing. All doors should be lockable, and measures should be in place to ensure that only approved users can gain access.

**Lighting.** If the facility is to be used after dark it should have good lighting, both within the shelter and along the routes leading to it.

**CCTV.** In places where CCTV cameras have been installed or where security staff patrol the premises, the cycle parking shelters should be similarly monitored.

|                      |  |
|----------------------|--|
| Type                 | Lockable shelters  |
| Purpose              | Secure, weatherproof, long term cycle storage                          |
| Approved for...      | Employment sites and residential locations.                            |
| Not approved for ... | Short-stay parking.  |
| Pros                 | Good level of security and weather protection. Popular with end-users. |
| Cons                 | Ongoing management and maintenance can be time-consuming.              |

## 6.2 Cycle lockers

Cycle lockers are common in mainland Europe and are becoming more so in the UK. Usually made from metal or very tough plastic materials they enclose a bicycle completely. Lockers are allocated to specific individuals. The user unlocks and opens the door, wheels their bike into the locker, and then closes the door and locks it.

Lockers offer several advantages over other forms of cycle parking:

- Bikes are completely protected from bad weather.
- Thieves cannot see whether the locker contains a high-value bike or is empty and are, therefore, unlikely to waste time attempting to break in.
- They are made from extremely tough materials and have locks that are resistant to being picked, drilled or forced.

- Cyclists can store items such as lights and luggage along with their bikes.
- Lockers are a flexible, modular form of parking. As demand grows, more lockers can be added.
- Lockers have a small footprint, and may be sited in small numbers in spaces where larger shelters or sheds would not fit.
- They are a high-status form of cycle parking – a personal parking garage – and are usually greatly appreciated and valued by those who use them.

Older designs of locker were secured by the bike user with their own lock. This is no longer acceptable as people sometimes “claim” a locker and then fail to use it), or use it inappropriately. Modern designs have integral locks and users are allocated a key, electronic smart card, or can gain access via a mobile phone app. A small monthly fee is often charged for use of a cycle locker.

Different styles of locker are available, including:

- Versions with a door at either end and a diagonal partition within, enabling each locker to accommodate two bikes.
- Larger lockers suitable for cargo bikes and other non-standard cycles.
- Small lockers, designed to be arranged in stacks of two or three within buildings for storing folding bikes.
- Lockers with electrical points for charging e-bikes.

Internationally recognised standards for the size of a bicycle are as follows: 1800mm long, 1200mm high and 700mm wide. Cycle lockers must exceed these dimensions. Cyclists need room to manoeuvre their bikes in and out of the lockers. A minimum aisle width of 1800mm is required for access.

Lockers are intended for long-stay parking and an additional quantity of conventional cycle stands (e.g. Sheffield stands) should be installed for cyclists who need short term parking.



|                      |  |
|----------------------|--|
| Type                 | Lockers  |
| Purpose              | Very secure, weatherproof, long term cycle storage   |
| Approved for...      | Employment sites and residential locations provided an efficient management and maintenance regime can be implemented.             |
| Not approved for ... | Short-stay parking. Vertical lockers and cage-type lockers are not approved. Lockers secured by users' own locks are not approved. |
| Pros                 | High level of security and weather protection. Popular with end-users.   |
| Cons                 | Relatively expensive. Ongoing management and maintenance can be time-consuming.  |

## 6.3 Bike hangars

Bike hangars are lockable storage units that accommodate a small number of cycles (usually 6). Access is via a single lockable door that lifts upwards. Inside there is a rack to which users can secure their bikes using their own locks. Hangars are usually used for long stay parking.

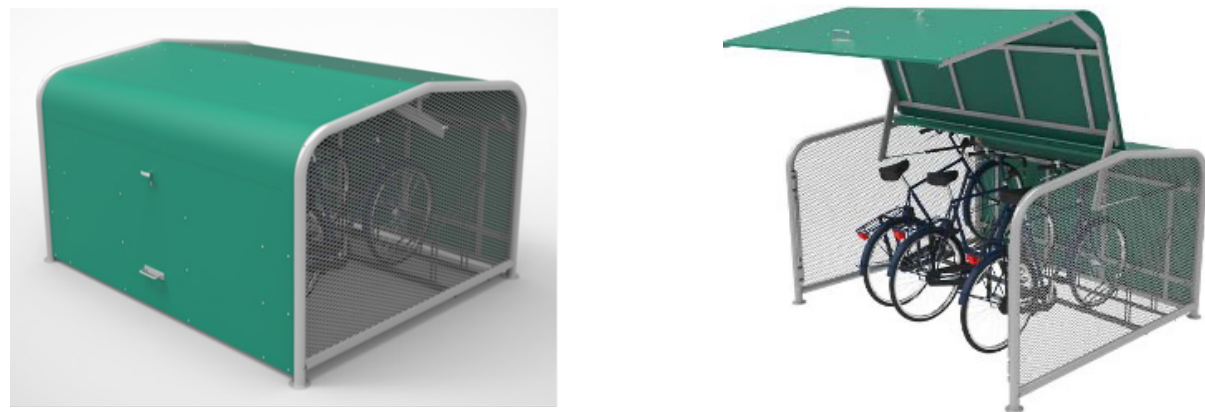
Standard dimensions for a 6-space hangar is 2030mm long (depth), 2500mm wide and 1330mm high (but additional clearance of 940mm needed for the door to be open).

Hangars offer several benefits:

- They are made from extremely tough materials and have locks that are resistant to being picked, drilled or forced.
- Bikes are completely protected from bad weather.
- Hangars are supplied in prefabricated form and are assembled on-site. The process can be reversed, and they can be moved to other locations if required.

Users are often required to sign up to a membership scheme whereby, for a regular monthly payment, they are allocated a parking space within a hangar. They are given a key, or gain access via a mobile phone app. Several hangar suppliers often offer this service: administering access and maintaining the hangars as part of an on-going contract.

Bike hangars are, increasingly, being installed in public spaces or at the side of residential streets to provide secure cycle parking for residents in blocks of flats or terraced housing, where cycle storage would otherwise be problematic.



|                      |   |
|----------------------|---|
| Type                 | Hangars   |
| Purpose              | Secure, weatherproof, long term cycle storage   |
| Approved for...      | Residential locations provided an efficient management and maintenance regime can be implemented. |
| Not approved for ... | Short-stay parking.   |
| Pros                 | High level of security and weather protection.  |
| Cons                 | Relatively expensive. Ongoing management and maintenance can be time-consuming.                   |

## 6.4 Garages and garden sheds

In residential developments, if dedicated cycle parking is not provided elsewhere, garages can be a convenient and secure place for bike parking, if designed correctly. The size of the garage must allow cycles to be removed easily without first driving out any car parked inside. Locking points, usually in the form of wall-mounted rails or rings, should be installed.

Garden sheds are acceptable to store bicycles providing there is access to the street without having to wheel the bike through the house. Sheds must be large enough to comfortably accommodate bicycle(s) - Internationally recognised standards for the size of a bicycle are as follows: 1800mm long, 1200mm high and 700mm wide.

Please refer to Swindon's Parking Standards for New Development for further information on garage dimensions and requirements

## 6.5 Bespoke cycle stores

As well as off-the-peg cycle parking solutions, bespoke facilities may be created. There are many ways in which high quality cycle storage can be incorporated into new developments, or retro-fitted into older buildings as part of a conversion or renovation. Purpose-built facilities can be tailored to the local environment, for example parking might be positioned so as to allow easy access to an adjacent cycle route. Purpose built facilities are also an opportunity to demonstrate architectural excellence through imaginative design.

Bespoke cycle storage should meet all requirements specified in this Standard regarding ease of access and use. Design proposals will be assessed on their merits.



# 7.0 Parking for non-standard, larger and adapted cycles

Cargo bikes, tricycles, bikes with trailers, and cycles designed for people with disabilities and mobility issues are becoming more commonplace. Developers should make provision for such cycles by ensuring that 5 percent of cycle parking installed (e.g one space for every twenty)

is suitable for such cycles, easily accessible, and signposted appropriately.

## 7.1 Access and egress.

Non-standard cycles are often significantly longer, wider and heavier than conventional bicycles. Routes leading to and from the cycle parking will need to be wider than usual.

Riders also need space to manoeuvre their cycles into the parking, to dismount, lock their cycles and unload any luggage.

Routes leading to and from the cycle parking should be at least 2.0 metres wide. There should be no steep gradients, steps, kerbs, barriers, or tight turns to negotiate. The ground should have a smooth even surface. Gates and doors may be problematic for people with disabilities. Lifts and electronic access systems such as entry-phones should be designed to take all users' abilities into account.

## 7.2 Types of stand.

### 7.2.1 Sheffield stand with low tapping rail

Sheffield stands with a low tapping rail (see section 5.4) are suitable for parking conventional cycles and children's bikes, and can be used for securing many types of non-standard cycle as well. The cycle is parked alongside the stand and secured with the rider's lock. Each stand can accommodate two cycles. They are installed in the same way as conventional Sheffield stands but more space is allocated around the stand. They should be positioned at least 1.5 metres apart and 1.5 metres away from any wall, kerb or other obstacle.



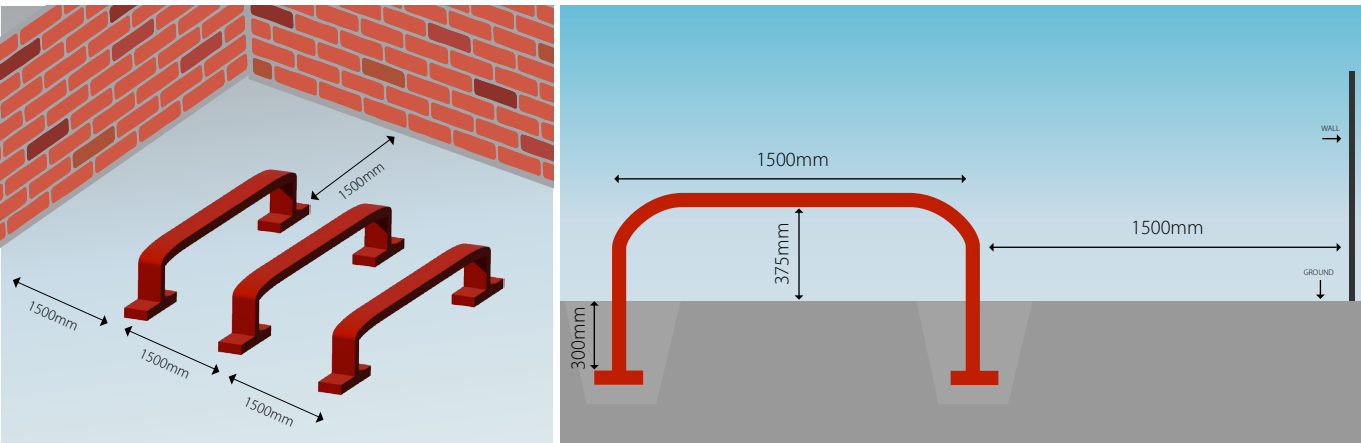
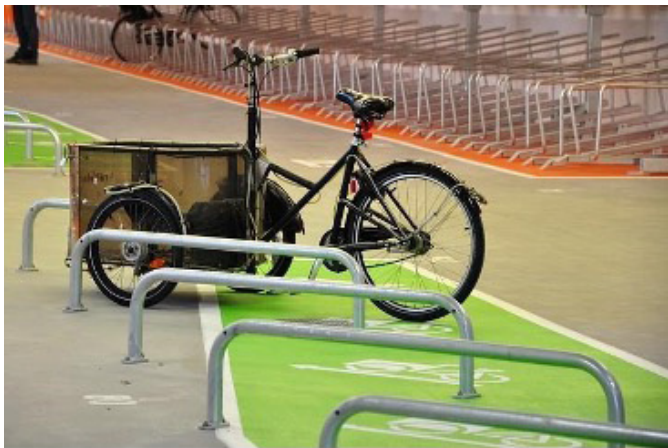
### 7.2.2 Long / low stand

A variation on the classic Sheffield stand. The cycle is parked alongside and secured with the rider's lock. Each stand can accommodate two cycles. They are installed in the same way as conventional Sheffield stands but more space is allocated around the stand.

The stands are usually installed in rows of three or more stands. Stands should be sunk into the ground and concreted into place. A bolt-down option is also available.

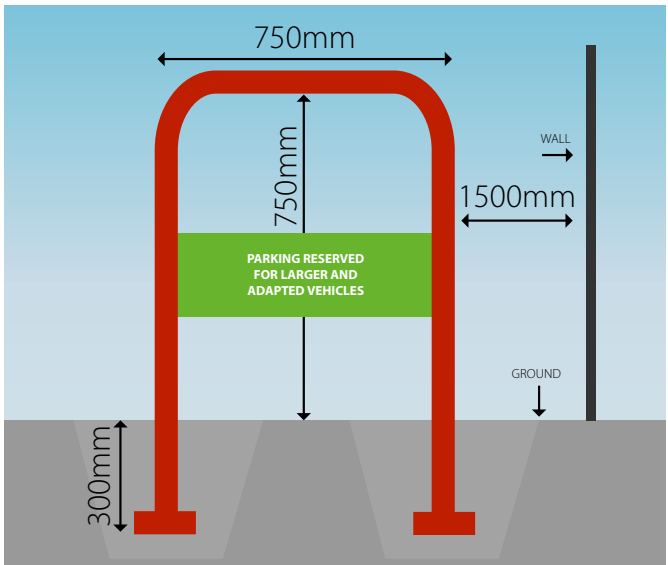
Long-low stands should be positioned at least 1.5 metres apart and 1.5 metres away from any wall, kerb or other obstacle. Because of their low height they can be difficult to see and are a potential

tripping hazard. Measures such as surface markings and signs should be put in place to warn people of the risk.



### 7.2.3 Reserved parking stand

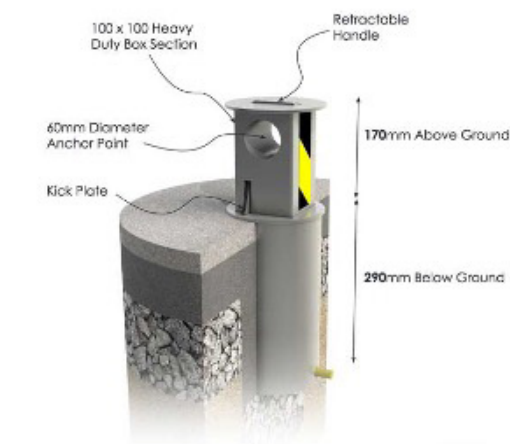
A Sheffield stand that incorporates a sign stating that parking is reserved for users of adapted cycles and cargo bikes. They are installed in the same way as conventional Sheffield stands but more space is allocated around the stand. They are often installed at the end of a row of Sheffield stands so as to be easy to reach and to use. In such a location the stand should be installed at least 1.5 metres from the next stand in the row, and 1.5 metre away from any wall, kerb or other obstacle.



#### 7.2.4 Ground or wall anchors

A wide range of ground- and wall-fixings are available. Properly installed, they provide a secure locking point. Designs of anchor that protrude from the ground are a potential tripping hazard and measures such as surface markings and signs should be put in place to warn people of the risk. Alternatively, retractable, telescopic ground anchors may be fitted.

Consultation with the people who will be using the parking facility is recommended, as some people with limited leg or foot control, or who cannot bend to the ground may find them difficult or impossible to use.



## 8.0 Parking for electric bikes

Electric bikes, or e-bikes, are becoming popular, in some cases replacing cars for short local trips. They can be expensive (high end models can cost several thousand pounds) and are therefore attractive to thieves. E-bike owners therefore value secure parking highly, especially if their bikes are to be left for lengthy periods. They also appreciate being able to park their e-bikes where they are protected from the weather.

Bespoke cycle stores and secure proprietary units such as cycle hangars and lockers (see section 6.0). meet these requirements.

Most models of e-bike have batteries that can be removed from the bike and charged using a standard electrical socket at home or at the workplace. However, in places such as shared cycle stores in residential developments, or workplace bike hubs developers should make provision for convenient e-bike charging by installing electrical sockets.

Alternatively, many manufacturers produce prefabricated cycle hangars, stores and lockers that include electrical sockets.

## 9.0 Types of cycle parking – Not approved

Many designs of cycle parking are available which appear to be more space efficient, more stylish, or more cost effective than the classic Sheffield stand. In practice these devices are barely fit for purpose and are likely to be ignored by cycle users, meaning time and money wasted. The devices listed below are not approved for use.

### 9.1 Butterfly stands or wheel grips.



These devices come in a variety of forms. All have serious disadvantages:

- They offer a very low level of security. Bikes can only be locked through the front wheel; and most modern bikes have wheels that are easily detached.
- They do not fit all bike types. Those with small wheels, with narrow tyres, or with wide off-road tyres often do not fit within the grip.
- They do not support bikes properly meaning they can topple over resulting in wheel damage.
- They are nicknamed “wheel-benders” by many cyclists and the devices are widely disliked.

Do not fit this type of cycle parking.

### 9.2 Wheel-and-channel racking

Racks of this type are relatively space efficient, but they have several disadvantages:

- They provide no opportunity to secure the bike's frame.
- Bikes are not properly supported and may topple over.
- Wide tyres may not fit the channel.
- They require the bike to be lifted and may therefore be unsuitable for users who lack the physical strength.

Do not fit this type of cycle parking.





### 9.3 Narrow stands

These resemble Sheffield stands but do not provide sufficient support for the bike frame. Do not fit this type of cycle parking.



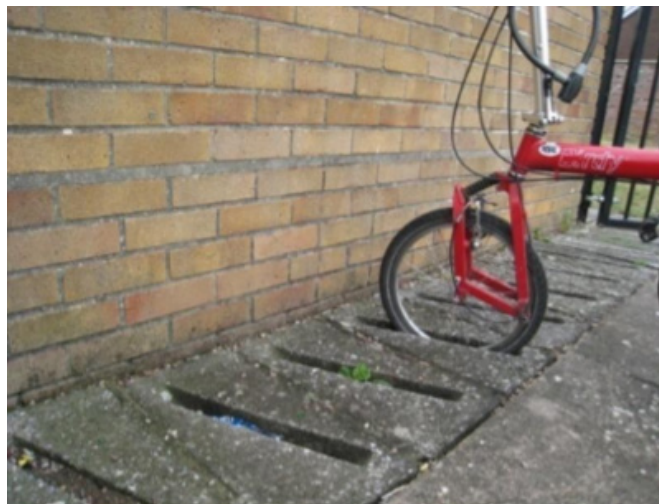
### 9.4 High density racks

This type of parking is space efficient, but inserting and securing a bike can be difficult, especially when the racks are crowded. Cables may be snagged and paintwork scratched. The racks do not allow users to lock both the bike's wheel and frame. Do not fit this type of cycle parking.



### 9.5 Slotted slabs or blocks

In theory a wheel slips into the slot and the bike stays upright. In practice, the slots fill with dirt and litter, they do not support the bike properly, they scratch wheel rims and provide no means of securing the bike with a lock. Do not fit this type of cycle parking.



### 9.6 Cycle pin

Many architects and designers find the minimalist lines of this type of device appealing, but they do not support bikes properly. Do not fit this type of cycle parking.



### 9.7 Domestic wooden sheds

Off-the-peg garden sheds are often made from very thin wood that succumbs to rot within a couple of years and is easily broken into. Do not install them for cycle parking.

Wooden structures will only be approved if they have walls of tongue and groove construction at least 18mm thick. The roof panel should also be at least 18mm thick. Doors should be at least 1000mm wide secured by mortice locks, rather than a hasp and padlock. Screw heads and other fastenings should be concealed.

### 9.8 Cages

Metal cages can provide secure cycle storage, but they have several disadvantages:

- They provide no weather protection, if installed outside.
- They have stark, utilitarian appearance which many people find unappealing.
- They are usually locked by the user with their own lock. This can lead to people "claiming" a cage and then failing to use it, or using it inappropriately.

Do not install this type of cycle parking.



### 9.9 Planter-type

Tubs or troughs with cycle parking loops attached are often installed by the owners of cafés, pubs and shops as a way of providing their customers with short-term cycle parking. Planted with flowers or herbs, the units can be very attractive.

However, this type of cycle parking requires regular maintenance if it is to remain attractive, and the level of security provided is less than that of conventional stands. They should not be installed by developers as original equipment.



# 10.0 Cycle parking by type of development

Please refer to Swindon's Parking Standards for New Development for further information on what is expected for new development.

|      |   |
|------|---|
| 10.1 | Residential premises  |
|      | Cycle parking in residential developments should be provided as specified below. Long-stay facilities where residents will store their bikes should be weatherproof, very secure, and with easy access and egress. In addition, small amounts of short-stay parking in the form of Sheffield stands, or similar, should be provided for visitors. |

|  |        | Type of development                                  | SBC Requirements            | Acceptable types of cycle parking   |
|--|--------|--|-----------------------------|---|
|  | 10.1.1 | Dwelling houses<br>Flats, maisonettes (1-2 bedrooms) | 1 space per unit.           | <b>For residents:</b><br>Shelters (6.1)<br>Cycle lockers (6.2)<br>Bike hangars( 6.3)<br>Garages and garden sheds (6.4)<br>Bespoke cycle stores (6.5)  |
|  | 10.1.2 | Dwelling houses,<br>Flats, maisonettes (3+ bedrooms) | 2 spaces per unit.          | <b>For visitors:</b><br>Sheffield stands, and other approved types of stand (5.1–5.7).<br>Canopies and open-fronted shelters (5.11)   |
|  | 10.1.3 | All houses of multiple occupancy (HMOs)              | 1 space per habitable room. | <b>For residents:</b><br>Shelters (6.1)<br>Cycle lockers (6.2)<br>Bike hangars( 6.3)<br>Garages and garden sheds (6.4)<br>Bespoke cycle stores (6.5)<br><br><b>For visitors:</b><br>Sheffield stands, and other approved types of stand (5.1–5.7).<br>Canopies and open-fronted shelters (5.11) |

|      |   |
|------|---|
| 10.2 | Non-residential premises  |
|      | Cycle parking in non-residential developments should be provided as specified below. Short-stay parking in the form of Sheffield stands, or similar, should be provided for customers, clients, visitors at commercial premises, and for students/pupils at educational establishments Long-stay facilities where employees/staff will park their bikes should be weatherproof, very secure, and with easy access and egress. |

|  |        | Type of development   | SBC Requirements   | Acceptable types of cycle parking   |
|--|--------|---|--|---|
|  | 10.2.1 | Retail and Leisure  | 4 spaces plus 2 spaces for every 500m2 above 1,000m2 (GFA)     | <b>For public use:</b><br>Sheffield stands, and other approved types of stand (5.1–5.7).<br>Canopies and open-fronted shelters (5.11)<br><br><b>For staff/employee use:</b><br>Shelters (6.1)<br>Cycle lockers (6.2)<br>Bike hangars( 6.3)<br>Bespoke cycle stores (6.5)  |
|  | 10.2.2 | Employment Development  | 4 spaces plus 2 spaces for every 500m2 above 1,000m2 (GFA)     |   |
|  | 10.2.3 | C2 Residential schools, Colleges and Hospitals  | Treated on merits based on a Transport Assessment              |   |
|  | 10.2.4 | D1 Nursery/Crèche/Infant Schools up to 7yrs old   | 1 per 10 staff (parking for infant pupils assessed on merits). | <b>For pupils/students/visitors:</b><br>Sheffield stands, and other approved types of stand, ideally in smaller sizes (5.1–5.7)<br>Scooter racks (5.8)<br>Balance bike racks (5.8)<br><br><b>For staff/employee use:</b><br>Shelters (6.1)<br>Cycle lockers (6.2)<br>Bike hangars( 6.3)<br>Bespoke cycle stores (6.5) |
|  | 10.2.5 | D1 Primary 7-11yrs/ Secondary Schools/Further and Higher Education Primary (7-11 years) and Secondary Schools, Further and Higher Education | 1 space per 7 staff and students.                              | <b>For pupils/students/visitors:</b><br>Sheffield stands, and other approved types of stand (5.1–5.7)<br>Scooter racks (5.9)<br>Balance bike racks (5.8)<br><br><b>For staff/employee use:</b><br>Shelters (6.1)<br>Cycle lockers (6.2)<br>Bike hangars( 6.3)<br>Bespoke cycle stores (6.5)                           |



# 11.0 Cycle parking in heritage areas and sensitive locations

In conservation areas, planning applications are needed for certain types of development that would not be required elsewhere. Conservation policy is not intended as a negative form of control, but as a positive method of protecting a locality’s distinctive character. Property values in conservation areas are often higher than elsewhere so it is very much in developers’ interests to comply.

If cycle parking is to be installed in a designated conservation area or listed building developers should discuss their proposals with an SBC conservation officer (see Appendix 3.) Further details about conservation areas is given at 14.0

Prior approval is essential for any works that affect the fabric of a building or outlying structures such as walls or paving, or which disturb the ground in places where there could be archaeological remains. Forms of cycle parking that impair the aesthetic appearance or character of an area may also be refused. Manufacturers have responded by producing a range of designs that attempt to address these concerns.

## 11.1 Heritage-style stands

Variations of the classic Sheffield stand are available shaped to resemble historical architecture features or street furniture such as cast-iron bollards. Please discuss with the conservation officers as early as possible.



## 11.2 Toast racks

Stands in toastrack formation (see section 5.3) may be preferred because their installation does not require the ground to be disturbed significantly.

## 11.3 Hitching rings

Post- or wall-mounted rings, loops and rails (see section 5.8) may be preferred because they cause minimal visual intrusion, although sinking bolts into the walls of listed structures is unlikely to be approved. The subtlety of such designs is also problematic in that cyclists may find it hard to find the cycle parking. Discreet, but effective, signing may be required.



## 11.4 Wood-effect stands

In rural locations such as country parks or the grounds of historical properties Sheffield-type stands made from steel but clad in hardwood can be a way to minimise visual intrusion and maintain an area’s natural feel.



## 11.5 Planter type

Devices such as the PlantLock can be useful in conservation areas as a last resort if other more permanent forms of cycle parking are not permitted. They comprise a trough-shaped plant container with toughened steel loops either side to which bikes can be locked. The weight of the soil in the trough discourages people from moving them, and they can be bolted to the ground through the drainage holes to enhance security further.



# 12.0 Signs

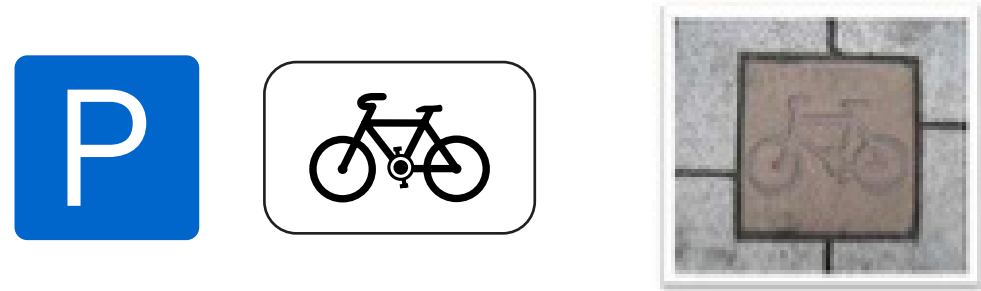
Good cycle parking facilities in prominent places is easy for cyclists to find. However, by necessity, some cycle parking will be situated in less-than-obvious locations. In such cases signs are needed to make people aware of the facility's existence and to encourage them to use it.

Signs are particularly useful if a novel or unusual type of cycle parking has been installed (for example wall-mounted rails) as many people will be unfamiliar with such devices. Similarly, in the case of lockable forms of cycle parking such as cycle lockers, people need to know how to gain access to the facility. Signs or notices can explain the procedure.

If a facility is used illicitly by motorcyclists, signs can make it clear that this is prohibited and direct them to an alternative location.

On private premises developers may opt to fit signs that follow a custom colour scheme or brand identity. Cycle parking on the public highway should conform to designs and instructions approved by the Department of Transport (DfT). Signs to this format may also be used on private premises. Design templates are available free of charge from the DfT's website, and they can be reproduced copyright free. See [www.dft.gov.uk/trafficsignsimages/](http://www.dft.gov.uk/trafficsignsimages/)

As an alternative to conventional signing or as a complementary measure surface markings or ceramic sets may be used.



Signage in heritage areas and sensitive locations should be discussed with the conservation officers in advance.

# 13.0 Maintenance and management

## 13.1 Stands

Cycle stands are relatively low maintenance. Mild steel cycle stands will last for up to 20 years, although the protective coating may start to crack and peel after just a few years. Stainless steel stands last indefinitely.

The maintenance requirements are:

- Periodic inspection.
- Clearance of litter, leaves and other debris.
- Removal and disposal of any abandoned bikes. Swindon has a bicycle recycling project that will take them – see Recycles - <https://recycles-swindon.co.uk>
- Removal and replacement of damaged stands.

## 13.2 Other

More elaborate facilities such as two-tier racks, shelters, bike hangars and cycle lockers need a more frequent inspection and maintenance regime. The points listed above apply, plus:

- Facilities where access is controlled via keys, combination locks, or a card swipe system needs administering.
- A more rigorous cleaning regime will be needed. Shelters need to be swept regularly.
- Lockers will need to be washed out or steam cleaned periodically.
- Two-tier racks require regular inspection, and their moving parts will need lubrication and adjustment.
- Facilities may need repainting every few years. Acrylic panels may need renewing.
- A procedure should be in place so that people can report problems and suggest improvements.

Cycle parking facilities are sometimes abused. For example, a cycle shelter may become a haven for smokers taking a cigarette break, or cycle stands may be utilised by motorcyclists. Facilities therefore need monitoring, and prompt action should be taken to prevent inappropriate usage. Levels of usage should be reviewed periodically, and cycle parking provision expanded as demand grows.

# 14.0 Further information

1. Suppliers of cycle parking and related equipment are available online at <https://www.swindontravelchoices.co.uk/switch-travel/travel-plans/travel-plan-guidance/>
2. Conservation areas in Swindon  
Details of the conservation areas in Swindon are listed at [https://www.swindon.gov.uk/info/20059/land\\_and\\_premises/373/conservation\\_areas](https://www.swindon.gov.uk/info/20059/land_and_premises/373/conservation_areas)
3. Useful contacts within Swindon Borough Council

| Role                             | Contact details  |
|----------------------------------|--|
| Travel Plans                     | <a href="mailto:transportplanning@swindon.gov.uk">transportplanning@swindon.gov.uk</a>       |
| Road Safety                      | <a href="mailto:stars@swindon.gov.uk">stars@swindon.gov.uk</a>                               |
| Transport Development Management | <a href="mailto:TransportDevelopment@swindon.gov.uk">TransportDevelopment@swindon.gov.uk</a> |
| Conservation                     | <a href="mailto:conservation@swindon.gov.uk">conservation@swindon.gov.uk</a>                 |



