



Installation of Bicycle racks/ancillary facilities within towns and villages and/or companies' premises

Among the necessary measures to support bicycle transportation, facilities for bicycle parking stand out as both vital and simple. However, such facilities may go unused if not installed properly and at appropriate locations. Good bike parking installations should accommodate all types of bicycles.

In the case of towns and villages, bicycle parking should be widely available and decentralised, so an abundant supply of bicycle parking near destinations will complement the inherent flexibility of bicycles as a mode of travel.

Short Term Parking (up to two hours)¹

Typical users are usually shoppers or visitors who prioritize convenience, proximity to destinations and ease of access.

Placement: Short-term bike parking spaces should be highly visible. In the case of companies, these should be within 20 metres of the entrance served. The parking area should be well-lit if used outside daylight hours. Placements should be avoided that block entrances, inhibit pedestrian circulation or that are too close to service or loading areas.

Security: All racks must be sturdy and well-anchored. Location is crucial. Users seek out parking that is visible to the public, and they particularly value racks that can be seen from within the destination.

Long Term Parking (more than two hours)

Long-term parking is mainly designed to meet the needs of employees who use bicycles as their mode of transportation. They would leave their bicycles unmonitored for a period of several hours. For this reason, additional security, shelter, and weather protection is essential.

Long-term parking can take a variety of forms, and apart from bicycle racks, one can also include ancillary facilities such as a room within the workplace, a secure enclosure within a parking space area or a cluster of bike lockers.

¹ Greater Manchester Cycling, Design Guidance & Standards, Version 2.0 (2014)

Placement: Outside company premises, similar overall considerations to those for short-term installations apply. Within company premises, there are additional possibilities, for example, Sheffield stands contained within secure compound or room ground level, as depicted below.



Another possibility is to have a secure enclosure within a parking space area or a cluster of individual horizontal cycle lockers as depicted below. It is to be noted that cycle lockers should be a minimum of 2.0m in length, 0.7m in width and 1.3m in height to enable larger commuting bicycles to use cycle lockers

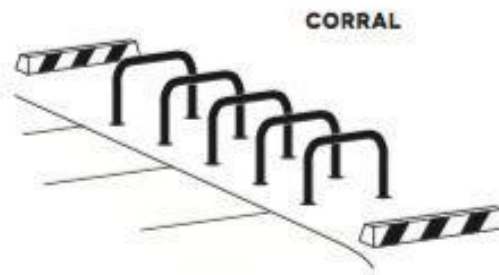


Security: Access to long-term parked bicycles must somehow be limited to individuals, for example through user-supplied locks, keys or other smart card technologies.

General Considerations

- Installations should be visible, accessible and convenient;
- Near destinations where people congregate naturally, for example shops, local councils, sports facilities, schools and child care centres, religious facilities, entertainment buildings, historical sites and medical clinics;
- As close as possible to the destination entrance and prominently located;
- Open, airy and well overlooked. People will not use a facility unless it is secure against theft and vandalism;
- Well laid out and easy to use. Plenty of space to get bikes in and out without snagging on their neighbours or getting oil on clothing;
- Installations should accommodate bikes of different shapes and sizes. Avoid designs and spacing that restrict the length, height, or width of bicycles, attachments, or wheels;

- The installation should be made either from stainless steel or from galvanised steel tubing that resists corrosion;
- Installations should be securely anchored to the ground using tamper-resistant hardware. The surface of the parking area should be finished so as to avoid puddles of water, mud and dust;
- The capacity of facilities in a given area should be sufficient to encourage bicycle use. As a guideline, a minimum individual installation contains two racks accommodating four bicycles. Larger installations, higher capacity racks, or multiple installations should be used if space permits. Bike corrals, as depicted below, that are located in the area adjacent to the curb can be used where pavement space is lacking;



- Covering, even when partial, is highly desirable;



Essential Requirements for Racks

Racks must:

- support bicycles at two points of contact (preventing bicycles from falling) in a stable, upright position without damage to wheels, frame and components;
- permit the locking of the bicycle frame and one wheel to the rack with a U-lock without the removal of the wheel;
- resist corrosion (with galvanised finish or stainless steel);
- be visible to pedestrians with a minimum height of 85 centimetres;
- be clearly distinguished from other racks by appropriate signage and icons;

- be securely installed to the ground, being affixed to concrete surfaces or sub-surfaces but not to asphalt. Bolts and spikes should be used to secure the bicycle racks to the ground.

Racks must not:

- require lifting of the bicycle to be used;
- be placed without first considering intended destinations.

Examples of Rack Types

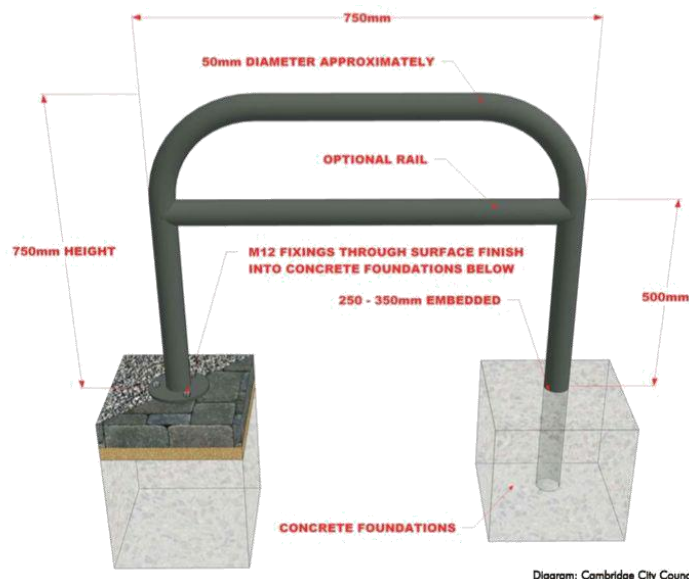
Sheffield Type



Sheffield cycle stands are recommended for the following reasons:

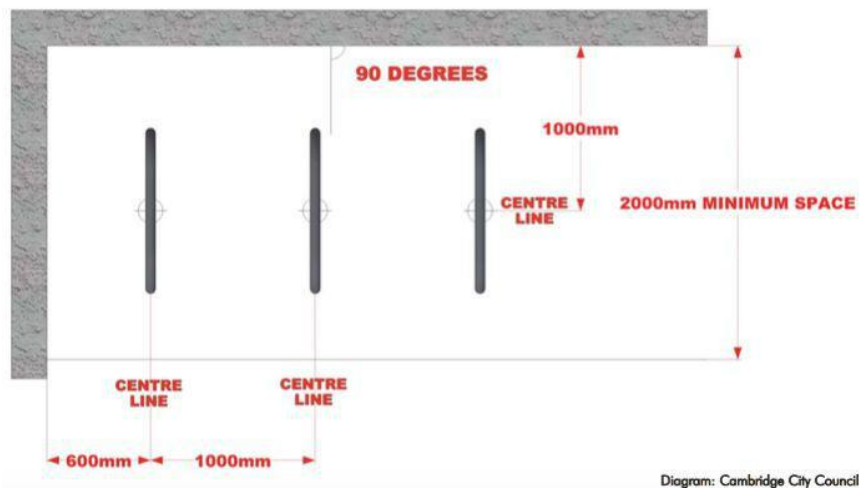
- They are liked by users (supports the cycle well and provides opportunities to lock back/and front wheels as well as the frame, easy to use and no lifting required);
- Two cycles can be locked to one stand;
- They are non-damaging to cycles if plastic coated (or similar);
- They are available in a wide range of styles, colours and finishes;
- They may be supplied as 'toast racks', that is, a number of stands on a common base which are easily bolted down;
- They are easy to maintain.

Dimensions²



- Stands should be embedded into 250 to 300mm concrete, if surface mounted they must be bolted into concrete foundations;
- The optional horizontal bar approximately 500mm above ground level makes suits smaller cycles and reduces slippage.

Spacing



The minimum spacing between Sheffield stands should be 1000mm. This distance is always measured from the centre line and at right angles to the longitudinal axis of the stand, even when stands are at an angle to a wall or kerb line:

² Cycle Parking Guidelines (2010), Environment and Planning, Cambridge City Council, The Guildhall, Cambridge CB2 3QJ, <http://www.cambridge.gov.uk/cycling>

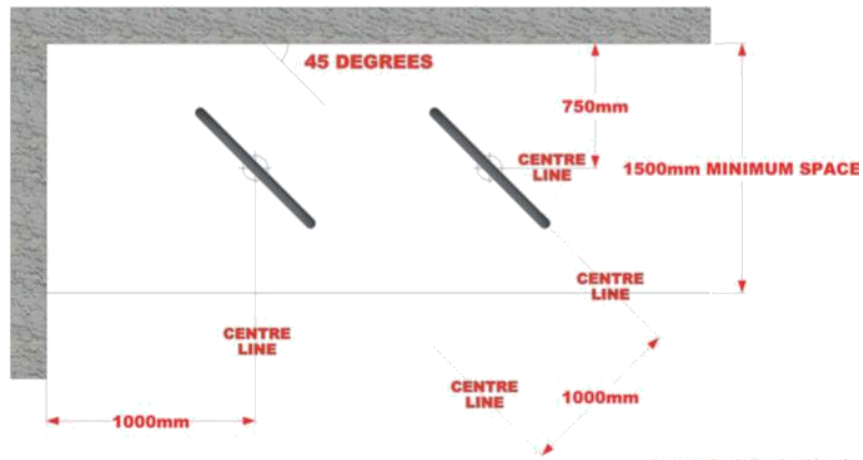


Diagram: Cambridge City Council

It is to be noted that poorly placed stands will not be used, as in the example below where there is insufficient clearance.



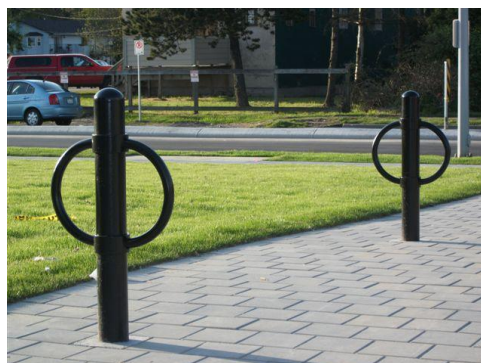
Variants of the Sheffield Rack

Some variants of the basic Sheffield design are acceptable provided they meet the essential requirements above. Below are some examples:







Circular Racks



Post and Ring Designs



Racks to Avoid³

<p>WAVE also called undulating or serpentine</p>		<p>Not intuitive or user-friendly; real-world use of this style often falls short of expectations; supports bike frame at only one location when used as intended.</p>
<p>SCHOOLYARD also called comb, grid</p>		<p>Does not allow locking of frame and can lead to wheel damage. Inappropriate for most public uses, but useful for temporary attended bike storage at events and in locations with no theft concerns. Sometimes preferred by recreational riders, who may travel without locks and tend to monitor their bikes while parked.</p>
<p>COATHANGER</p>		<p>This style has a top bar that limits the types of bikes it can accommodate.</p>
<p>WHEELWELL</p>		<p>Racks that cradle bicycles with only a wheelwell do not provide suitable security, pose a tripping hazard, and can lead to wheel damage.</p>
<p>SPIRAL</p>		<p>Despite possible aesthetic appeal, spiral racks have functional downsides related to access, real-world use, and the need to lift a wheel to park.</p>
<p>SWING ARM SECURED</p>		<p>These racks are intended to capture a bike's frame and both wheels with a pivoting arm. In practice, they accommodate only limited bike types and have moving parts that create unneeded complications.</p>

³ Essentials of Bike Parking, Association of Pedestrian and Bicycle Professionals, Canada, <http://www.apbp.org>

The Schemes

A. Local Councils' Scheme

Government is allocating funds whereby Local Councils are encouraged to come up with a plan to promote the use of bicycles as a means of transportation within their localities.

Strategic sites are to be chosen for the installation of bicycle racks and, in collaboration with the Bicycle Associations, the first cycling routes will eventually be planned.

Local Councils are to come up with a detailed plan on the whereabouts of installing bicycle racks and cycle routes within their community.

B. Bicycle Racks/ ancillary facilities (companies) Scheme

Government is allocating funds whereby companies are encouraged to come up with a plan to promote the use of bicycles with their employees as a means of transportation to the workplace. Government will be reimbursing up to a maximum of 50% of the approved capital expenditure.

Interested companies are to come up with a detailed plan on the whereabouts of installing bicycle racks/ ancillary facilities within their premises.

In both cases, applications are to be sent to:

The Bicycle Rack Fund
The Ministry for Finance and Employment
Maison Demandols,
30, South Street
Valletta.