

**Cycle Facilities Design Guide**  
**for the**  
**Harwell Science & Innovation Campus**



**HarBUG**  
Harwell Bicycle Users Group

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## 1 Introduction

Harwell Science & Innovation campus is successful and growing. Due to the geographical position of the campus almost everybody has to travel to the campus. The pressure is increasing on the road infrastructure and there is neither the public money nor the political will to significantly upgrade the road network surrounding the campus.

Encouraging employees to cycle to work will help relieve the congestion and has many other benefits both to the cyclists and the company for a small initial investment. Benefits include:

- i) Cycling to work will increase the fitness of the cyclist and reduces the risk of many illnesses like coronary heart disease.
- ii) Outdoor exercise, like cycling, boosts the body's immune system which may result in fewer days off sick.
- iii) Cycling is a stress reliever. Cyclists arrive at work in better mental and physical shape.
- iv) Cyclists are more likely to arrive on time as they do not get caught in traffic congestion especially as many routes to the campus are off-road.
- v) Save on car parking spaces, you can fit 12 to 16 bikes in one car parking space.

One of the main reasons given for not cycling to work is the lack of facilities like showers and changing areas. HarBUG is keen that all new developments or refurbishment on the Harwell campus should include high quality facilities for cyclists (although facilities like showers and changing rooms will be shared with non cyclists like runners and motorcyclists).

## **2 Use of Design Guide**

This design guide is intended for management, developers, architects and planners to ensure that the design, specification and space for cycling facilities are included at the start of a project and are not an afterthought.

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This guide may be downloaded from our website, [www.harbug.org.uk](http://www.harbug.org.uk). Please feel free to contact HarBUG, [info@harbug.org.uk](mailto:info@harbug.org.uk) to discuss any aspects of this design guide or for any advice on cycle facilities provision.

This document has been prepared using guidelines from the main U.K. Cycling authorities: C.T.C. and Sustrans and from local and national government guidelines.

### 3 Cycle Parking

#### 3.1 Notes on cycle parking

- i) All cycle parking at the Harwell campus is designated as long term parking i.e. typically over 6 hours and should be protected from the weather.
- ii) Due to the location of the Harwell campus, cycle theft or damage is rare so cycle parking is designated as medium to low security i.e. cycle lockers or locked compounds are not necessarily required but facility to lock bikes to an immovable structure is required.

#### 3.2 Cycle stand types

The HarBUG preferred cycle stand is the Sheffield stand, this type (an arched tube) is also one of the simplest and cheapest stands available. The Sheffield stand can be fitted individually or as a multiple stand and can come pre-fitted in a protective shelter.



*Illustration 1: Sheffield Stands - HarBUG preferred option*



*Illustration 2: Gutter Stands - please avoid*



*Illustration 3: Vee Stands - please avoid*

There are many bad designs for cycle stands available including; gutter types that hold the wheels in a metal gutter and vee types that clamps the front wheel. These types can damage cycle wheels and are not worth fitting as most cyclists will not use them.

### **3.3 Number of cycle stands**

The minimum number of cycle stands recommended for research and development sites are 1 cycle parking space per 10 staff members. Sheffield stands can accommodate two cycles so for a company with 100 employees 5 Sheffield stands will be needed as a minimum. Space should be allowed for expansion of cycle parking if needed. For large buildings or sites extra stands may need to be considered to allow for using cycles as a means of transport around the site.

### **3.4 Cycle shelters**

Cycle parking at the Harwell campus is long term and any cycle stands should be covered to protect cycles from the weather.

The cycle shelter should cover the stands with a roof and three sides. The remaining side should remain open for access.

Cycle shelters can be custom built or there are many suppliers of shelters that are pre constructed with cycle stands (check for Sheffield type) already built in.

Cycle shelters should have lighting either directly inside the shelter (preferred) or if the shelter has transparent sides external indirect lighting may be sufficient e.g. from street lighting. Lighting should provide a uniform lighting level throughout the shelter.

Cycle shelters should be positioned so that the open side is facing away from the prevailing weather.

If a new building is being planned then cycle shelters should be discussed at the outset with the architect / planner so that they can be specified or designed to be in keeping with the main building.



*Illustration 4: Example of a Cycle Shelter to HarBUG Standards*

### **3.5 Positioning of cycle parking**

Cycle parking should be sited close to the entrance of the building it serves. For large buildings this may mean several smaller cycle parking areas at different entrances rather than one big one at the main entrance. Again position of cycle parking should consider the use of cycles as a means of transport around large sites.

Cycle parking and access routes to cycle parking should be well lit at nights and early mornings.

Access routes to cycle parking should be designed so that cycles can be ridden to the parking area without the need for dismounting or coming into conflict with pedestrians or other road users.

Access routes to cycle parking should be designed for cycles e.g. wide surface, no sharp bends and solid surfaces (no gravel).



## **4 Showers & Changing Areas**

Depending on the size of the company showers can be either individual shower rooms or a facility with a group of showers.

### **4.1 Individual Shower Rooms**

Individual shower rooms can be unisex or designated for each sex. Individual shower rooms should include a changing area which is twice the area of the shower area, typical 1m<sup>2</sup> for the shower area and hence 2m<sup>2</sup> for the changing area.

The shower room should have a lockable door.

If the shower area and changing area share a common floorspace 'wet floor' then the shower area should be screened off from the changing area with a solid screen i.e. not a curtain.

The changing area should contain a reasonable sized mirror, several wall/door mounted hooks (minimum of four) and a towel rail.

Showers should be thermostatically controlled to avoid scalding. The rate of flow and the temperature of the water should be adjustable.

The shower area should be fitted with a soap dish and a hook to allow shower gel bottles to be hung from them. A towel rail / ring should also be fitted in or close to the shower area but out of reach of the spray to allow the users to towel down in the shower area.

The shower room should be adequately ventilated, typically 15 to 20 air changes per hour to remove condensation. The shower room should have adequate lighting levels.

Other facilities that may be provided for individual shower rooms are: a wall mounted fold down seat, small piece of duck board, paper foot mats.

### **4.2 Group Shower Rooms**

For larger organisations a requirement for a group of showers and a communal changing area may be necessary. Guidance on the design of group facilities can be found in the following documents:

- i) Sport England Design Guidance Note: Changing Rooms & Lockers.  
[http://www.sportengland.org/index/get\\_resources/resource\\_downloads/facilities\\_guidance.htm](http://www.sportengland.org/index/get_resources/resource_downloads/facilities_guidance.htm)
- ii) Football Foundation Facilities Data Sheet 4: Changing Rooms & Clubhouses.  
<http://www.footballfoundation.org.uk/seeking-funding/facilities-scheme/data-sheets>

Group shower rooms generally have several shower heads with a communal drying off area and an adjacent changing room. Optionally group shower rooms may also contain toilets.

It is preferable for each shower head to have individual controls for flow rate and temperature and for each shower head to be partitioned off from each other to create individual shower cubicles.

Each shower head should be fitted with a soap dish and a hook to allow shower gel bottles to be hung from them.

The drying off area should contain several wall mounted hooks (at least two per shower head).

The changing area should contain benches for seating and plenty of hooks for hanging clothes. Also the changing area should have a grooming area fitted with a large mirror for use by more than one person or several smaller mirrors, a shelf below the mirrors and optionally hair dryers.

The changing area may also contain lockers.

### **4.3 Number of Showers**

The number of showers required by organisations at the Harwell Campus will be higher than other equivalent employment areas because the majority of cyclists will be cycling 5 miles or more from the three main towns; Abingdon, Didcot and Wantage. The campus is uphill from all three towns so many cyclists will be hot on arrival. Also on the campus there are a high number of employees working in office based environments which means that clothing for cycling to work in are not suitable for working in. Any organisation / building should have a minimum of one unisex shower or two single sex showers. Typically there should be one shower per 50 employees. Ideally for new buildings with planned individual showers, the showers should be designated unisex showers initially and then allocated to each sex depending on demand and if required.

## 5 Lockers

Most cyclists will be carrying luggage (e.g. change of clothing, lunch) either in a rucksack or on cycle panniers. Lockers provide somewhere to store the luggage along with helmets, cycle clothing and trainers and stop work areas, offices or shower rooms becoming cluttered.

Lockers should be high enough and deep enough to allow jackets, shirts and trousers to be hung from a clothes hanger and also be wide enough to fit cycle panniers / rucksack alongside the clothes. There should also be space to store shoes, cycle helmet and valuables either in a separate compartment or shelf.

Lockers should have ventilation slots at the top and bottom to permit clothing to air.

The standard sports & leisure locker is 1050mm high x 400mm wide x 600mm deep.



*Illustration 5: Standard style of locker that meets all requirements with separate shelf and space for hanging clothes*



*Illustration 6: Z or L style locker meets all requirements in space saving format*

## **6 Drying Rooms**

A drying room is useful for wet weather days to allow clothing to be hung and dry out before the cycle journey home. This is commonly provided in hotels, B&Bs and hostels that are cycle friendly.

The room only needs to be a small cupboard type room or could be a large wardrobe style enclosure.

The drying room needs to have a gentle source of indirect heat to dry clothing items. This needs only to be a small source but should be independent of the building heating system so that it can be used when the building heating is switched off during the summer months. This source of heat could be from a recycled source e.g. from air conditioning exhaust.

The drying room should have a floor that is covered with waterproof material so it is not damaged by drips from wet clothing or else be fitted with drip trays.

The drying room should be fitted with a clothes rail to hang wet clothes on and hooks for other equipment like gloves, socks and shoes.

The drying room should be ventilated to allow damp air to escape.

## **7 Toolkit**

A communal toolbox is a useful resource for carrying out puncture and other minor 'get you home' repairs. The toolkit should be kept where minor repairs can be carried out. The use of the toolkit is based on trust, cyclists take what they need and then return or replace it. HarBUG are willing to specify and source toolkits.

A toolkit should include the following:

- Large puncture repair outfit.
- Track pump fitted with a pressure gauge and suitable for both presta and Schraeder-type valves.
- Portable cycle work stand
- Screwdrivers (various sizes).
- Spanners (various sizes).
- A set of Allen keys.
- Spoke key.
- Oil, grease and WD40.
- Barrier cream and / or Swarfega
- Disposable cloths or paper towels.

## **8 Suppliers**

Some suppliers are listed below. The list is not exhaustive and there are others suppliers.

### **8.1 Cycle Shelters**

The suppliers below supply a wide variety of cycle shelters. Some conform to our standard (Sheffield stands and covered on three sides plus roof), others do not.

Premier Shelving & Locker Co. Ltd. <http://www.premierlimited.co.uk>

Glasdon Manufacturing Ltd. <http://www.glasdon.com>

Broxap Ltd. <http://www.broxap.com>

### **8.2 Lockers**

Simply Lockers <http://www.simplylockers.co.uk>

Sport Thieme <http://www.sport-thieme.co.uk>

## **9 Acknowledgements**

Cycle friendly Employers' Guide, Cycle West, Bristol

Cycle Parking Information Sheet, CTC / Sustrans.

Cycle Parking Standard, North Somerset Council.

Workplace cycle parking guide, Transport for London.

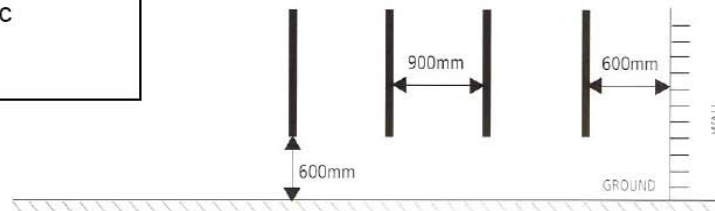
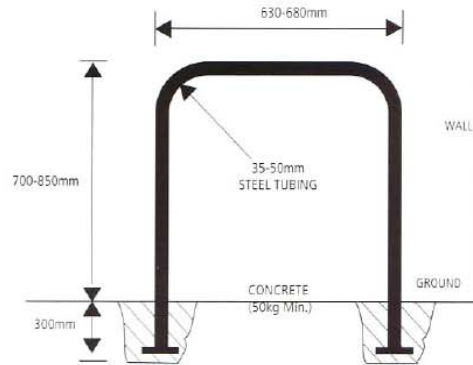
Changing Rooms & Lockers Design Guidance Note, Sport England.

Changing Rooms & Clubhouses Facilities Data Sheet, Football Foundation

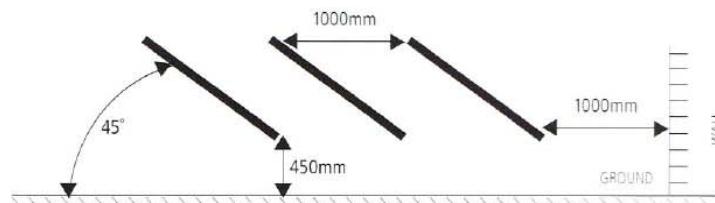
## 10 Appendix 1 – Layout and Installation Details for Sheffield Stands

**Material and finish:**  
Galvanised with optional powder coating or nylon coated. Stainless steel will stay looking smart for many years.

**Mounting:** May be either concreted into the ground, or bolted through base plates. Bolts should be tamper-proof or the racks grouped in a toast-rack formation. Racks should not be individually surface mounted in tarmac surfaces.



ARRANGEMENT PARALLEL TO WALL (As viewed from above)



ARRANGEMENT AT 45° TO WALL (As viewed from above)



ARRANGEMENT AT 30° PARALLEL TO WALL (As viewed from above)