APPENDIX A: CYCLE PARKING DIAGRAMS

All diagrams © Transport Initiatives (except Diagram 1)

(All dimensions in mm - not to scale)
The following drawings are intended to help with the design of any Sheffield stand layout. These stands are featured because they are almost always the best solution: they are cheap to install and maintain and each stand can park two bikes (one on either side). Where appropriate, the drawings also include adequate space to ensure clearance from passing pedestrians and other site traffic. The manufacturers of two-tier parking equipment will be able to help with the layout of their products and may even be able to offer a design service.

Large areas of parking can benefit from being broken up into defined sections with the use of colour or numbers. This will help users remember where they left their cycles.

Diagram 1: Basic Sheffield stands

Notes: Based on London Cycling Design Standards – A guide to the design of a better cycling environment, TFL 2005

Stands should always be installed in accordance with the manufacturer’s instructions
When identifying space for bikes, it is worth being aware that they are, on average, 1,800mm long and 650-700mm wide, depending on handlebar width. When two bikes are parked either side of a single stand they should be staggered to avoid a clash of handlebars or pedals. This creates a footprint of 2,000mm x 1,000mm. This dimension is useful in determining how much space is needed.

**Diagrams 2 & 3: Bike footprints**

![Diagram of bike footprints](image)

Note: When being pushed, the overall width of the bike and cyclist increases to roughly 1,100mm.

**Diagram 4: Stands at 90° to wall or building line and passing vehicles**

![Diagram of stand placement](image)

Note: The preferred distance from passing vehicles is 2,000mm. This may be reduced to 1,500mm where a kerb separates the cycle parking from site traffic.
Diagram 5: Sheffield stands at 90° to pedestrian path and passing vehicles

Note: The preferred distance from passing traffic is 2,000mm where there is no kerb.

Diagram 6: Sheffield stands parallel to wall or boundary

Note: “Distance from wall” dimensions also apply when the stand is the last in a line of several at right angles to the wall (i.e. each stand is parallel to the wall). The recommended minimum distance quoted allows cyclists to attach their locks more easily. Where single-sided parking along a wall is being considered, a cheaper alternative could be the use of wall bars or anchors.
Diagram 7: Stands at 45° to wall and passing vehicles

Note: The preferred distance is 1,750mm from passing vehicles. This may be reduced to 1,500mm where a kerb separates the cycle parking from site traffic.

Diagram 8: Stands at 45 degrees to kerb and pedestrian path
Diagram 9: Aisle widths

Note: Should it prove necessary to compromise on aisle width or any other dimension, for example for an irregularly shaped site, it is essential that the proposed layout is tested to ensure that it works in practice (assume 1,800mm x 650mm per bicycle).

Where large numbers of bicycles are parked, it is recommended that the aisle widths be increased (at least doubled) to allow cyclists to pass in comfort.

Diagram 10: Two-tier stands

Note: manufacturers/suppliers are able to provide detailed advice in installation and layouts
Bike footprints — access, movement and turning (all dimensions mm)

Diagram 11 (Left): Cyclist on the left hand side of the bike turning right
Diagram 12 (right): Cyclist on the left hand side of the bike turning left

Diagrams 13 & 14: Cyclist turning through 108° to left and right

Note: These diagrams (11 – 14 inclusive) may be reversed to allow for a cyclist with their bicycle on their left.