

EDINBURGH ST JAMES

Supporting Transportation Statement

June 2016

Prepared by SWECO

AMSC Report – Transportation Statement

Edinburgh St James

116062/LM/160530

Revision 1.1

Report Prepared For: TH Real Estate

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Contents

1.	Introduction.....	4
2.	Cycle Parking (iv)	5
2.1	Type and Location of Cycle Parking.....	5
2.2	Quantum of provision	5
3.	Pedestrian and Cycle Access (vii).....	8
3.1	Context	8
4.	Amendments / Treatment of Adopted Roads & Footways (ix).....	10
4.1	Context	10
4.2	Introduction.....	10
4.3	Little King Street and Cathedral Lane	10
4.4	St James Place.....	10
4.5	Elder Street.....	11
4.6	St James Square / James Craig Walk	11
5.	Servicing (xi).....	12
5.1	General Servicing.....	12
5.2	Emergency vehicle access	12

Appendices

Appendix A Cycle Storage Specifications

1. Introduction

This report has been prepared to accompany an application in respect of reserved matters associated with Condition 23 of planning permission 08/03361/OUT. This statement updates previous submissions in response to a number of design development changes to the Edinburgh St James scheme previously approved under the ARM, PRM, SRM, and Central Hotel AMSC applications.

More specifically, the following items are addressed in this report, providing technical analysis, parameters, and key assumptions which have been used to inform the design process:

Condition 23: reserved matters

- iv) The type, location, and numbers of cycle parking facilities for both staff/guests and customers. All cycle parking to be in accordance with the Council's parking standards.
- vii) Pedestrian and cycle access arrangements, including access through the development;
- ix) Amendments or any treatment to adopted roads or footways; and
- xi) Details of servicing of the development.

2. Cycle Parking (iv)

2.1 Type and Location of Cycle Parking

Staff cycle parking will be provided within secured areas in basement level B3, grouped at a location convenient for access to the associated changing facilities and with access from the associated lift core available through the car park. BDP drawings ESJ-BDP-XX-PB3-DR-A-66001_04 and ESJ-BDP-XX-PB3-DR-A-74102_00 show provision at basement level B3, with drawings ESJ-BDP-XX-P03-DR-A-66006_03 and ESJ-BDP-XX-P01-DR-A-66004_03 showing how the lift core will be accessed. To accommodate the proposed 300 spaces, double height cycle storage facilities will be provided; an example specification is provided in **Appendix A**.

It is expected that staff will change and shower at their place of work; accommodation has been designed to support provision if required. As previously mentioned communal locker and showering facilities will also be provided at level B3 for general staff use as illustrated on BDP drawings ESJ-BDP-XX-PB3-DR-A-66001_04 and ESJ-BDP-XX-PB3-DR-A-74106_00.

Cycle parking for residents will be provided in basement level B2 and B3, within secure residential car parking areas, accessed by the resident only lifts. Drawings ESJ-BDP-XX-PB3-DR-A-66001_05, ESJ-BDP-XX-PB2-DR-A-66002_05 show the location of provision within the parking area, drawings ESJ-BDP-XX-PB3-DR-A-74103_01, ESJ-BDP-XX-PB3-DR-A-74107_00 and ESJ-BDP-XX-PB2-DR-A-74105_01 provide further detail on layout, and drawings ESJ-BDP-XX-P03-DR-A-66006_03, ESJ-BDP-XX-P01-DR-A-66004_03, and ESJ-BDP-XX-P02-DR-A-66005_01 show how lift cores will be accessed. A mixture of storage types will be provided to accommodate up to 300 spaces, with details provided in **Appendix A**.

Cycle parking for customers and visitors will be provided at key surface level locations around the development, located in close proximity to entrances. OPEN drawing ESJ-OPE-ZZZ-SE0-DR-LA-LS101 Rev B illustrates the distribution of 150 surface spaces. Sheffield style cycle racks will be used, the specification for which is provided in **Appendix A**.

2.2 Quantum of provision

Several parameters have been considered when determining the quantity, type, and location of cycle parking provision. These include expected staff numbers (around 1,800 on site at any given time), schedule of accommodation, council design standards and the Local Transport Strategy. These can be summarised as follows:

Table 2.1 - Schedule of Accommodation

Land use	Quantum
Retail units	19,400m ²
Retail kiosk	181m ²
Department store	27,658m ²

Land use	Quantum
Retail MSU	15,549m ²
Hotel	214 rooms
Cinema	346 seats
Residential	150 apartments
Apart hotel	67 units

Source SJQ-D10-N07 160601 from AMA

Table 2.2 - City of Edinburgh Council Cycle Parking Standards

Land use	Standard
Retail	1 customer space per 500m ² and 1 staff space per 250m ²
Hotel/Apart hotel	1 space per 10 bedrooms
Cinema	1 staff space per 100 seats and 1 customer space per 50 seats
Residential	2 spaces per flat and 1 visitor space per 10 flats

The City of Edinburgh Council (CEC) Local Transport Strategy 2014-2019 (LTS) sets out travel mode share targets for the city. Section 2.3 specifies targets for share of journeys by different modes of transport for travel to work, identifying a 2020 target of 15% for cycling. To provide some context, discussions with CEC suggest that current mode share is around 4 to 5%, requiring a step change to achieve the target over the next 5-6 years.

Combining the schedule of accommodation above with the Council's standards suggests cycle parking provision as follows:

Table 2.3 - CEC Design standards based provision

Land use	Standard
Retail	251 staff spaces and 126 customer spaces
Hotel/Apart hotel	28 staff spaces
Cinema	4 staff spaces and 7 customer spaces
Residential	300 residents spaces and 15 visitor spaces

The above table suggests a total of 283 staff cycle parking spaces, 148 visitor/customer spaces and 300 residential spaces are required. Note that standards allow reductions where communal spaces are provided, subject to agreement with CEC. CEC has confirmed that reductions will be considered where high quality infrastructure is provided.

A sense check has been undertaken which compares proposed provision associated with design standards against expected number of staff on site at any given time (1,800) and LTS cycle mode share target of 15%. Applying 15% to 1,800 staff suggests that if the 2020 mode share target is met, that 270 staff spaces would be required. This is broadly in line with the standards based approach and confirms that full provision would future proof to accommodate demand associated with LTS aspirations. Proposed provision meets or exceeds CEC design standards.

3. Pedestrian and Cycle Access (vii)

3.1 Context

Item (vii) under condition 23 of the OPP required details of 'Pedestrian and cycle access arrangements, including access through the development.

Primary pedestrian and cycle routes are illustrated in Figure 3.1 and the cycle access strategy is illustrated in the BDP drawings as noted below. Little King Street and Elder Street (part) to Leith Street via James Craig Walk will be shared pedestrian and cycle links, with vehicles also allowed on Little King Street and Elder Street/James Craig Walk as far as James Craig Square. The Galleria will be a pedestrian only route, with the exception of the short section which links Little King Street and James Craig Walk as part of a 24 hour route. It is expected that cyclists passing through the Galleria will dismount before doing so.

Pedestrian access arrangements are illustrated on **Figure 3.1**. Primary access points include the following:

- Galleria access from the southern end of Leith Street (time managed).
- Galleria access from Elder Street/James Craig Walk, opposite Multrees Walk (time managed).
- New John Lewis Partnership access towards the northern end of Leith Street (time managed).
- General access from Little King Street, providing a 24 hour north/south route via the Galleria to James Craig Walk (open 24 hours)
- Residential access at Elder Street and St James Place (controlled access at all times)

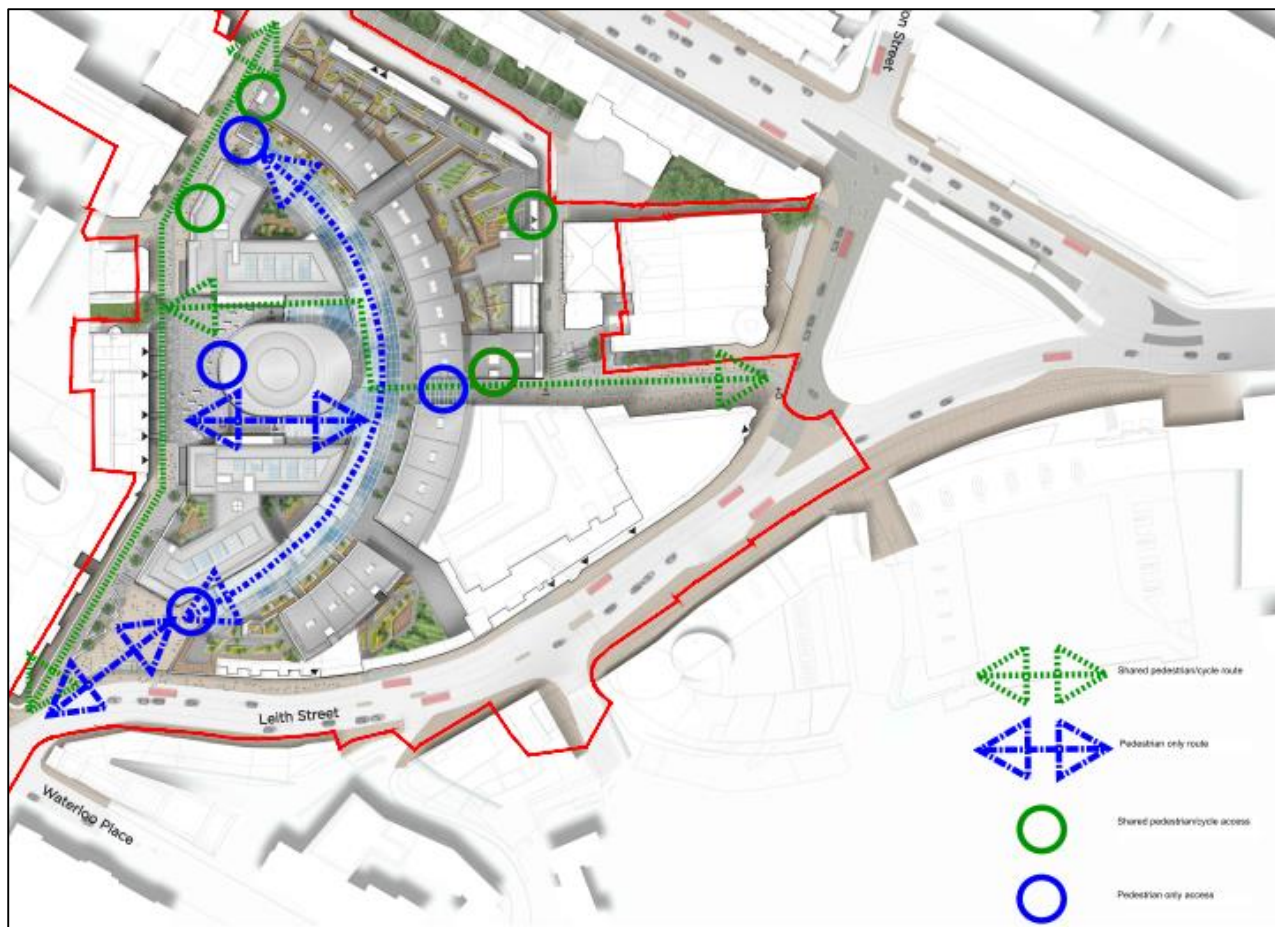
A 24 hour route for pedestrians and cyclists will be provided through Edinburgh St James, linking Little King Street to James Craig Walk. A lift and stair core has been designed to facilitate this route, which is required to overcome the level difference between Little King Street and James Craig Walk. This will create a north/south link to complement the east/west link provided by Elder Street/James Craig Walk.

Both Little King Street and James Craig Walk have been designed to recognise their importance as key pedestrian and cycle routes.

Cycle parking will consist of surface parking provision for visitors and basement provision for residents and staff.

Figure 3.1 illustrates the locations of surface provision and the associated routes to reach this. BDP drawings ESJ-BDP-XX-P01-DR-A-66004_03, ESJ-BDP-XX-P02-DR-A-66005_01, ESJ-BDP-XX-P03-DR-A-66006_03 illustrates the access point for staff and resident cycle parking, which consists of 8 suitably sized lifts and stair core. Each lift will provide direct access to cycle parking in basement levels B2 and B3 for residents and B3 for staff.

Figure 3.1 - Key Pedestrian / cycle routes and access points



4. Amendments / Treatment of Adopted Roads & Footways (ix)

4.1 Context

Item (ix) condition 23 of the OPP required details of 'Amendments or any treatments to adopted roads or footways.

4.2 Introduction

A number of amendments to the current adopted roads and footways around the current St James centre will be required to accommodate the design for Edinburgh St James and its various elements. This chapter will look at each area / street where amendments to adopted roads will be required within the area defined for this application

4.3 Little King Street and Cathedral Lane

The development plans allow for Little King Street to remain one-way northbound as per the existing movement order. This will allow any vehicles permitted to enter the area via St James Place or Cathedral Lane to exit towards Leith Street. These vehicles will generally be servicing vehicles associated with the residential properties, the Cathedral, local businesses and others who require local access. Provision has also been made for a lay-by on Little King Street which could be designated as blue badge and/or Pay & Display parking bays (4 No.), or a pick up/drop off/loading bay. This provision is less than at present and the removal of existing parking spaces will be included within the TRO package for Little King Street.

Cathedral Lane will operate as a one-way road in a southbound direction as per the existing permanent movement order. It will continue to provide vehicular access to local properties, including the Cathedral, and will facilitate access to the residential car park at Edinburgh St James. It will not be possible to turn right from Cathedral Lane to St James Place, which will prevent Cathedral Lane becoming a rat-run for vehicles accessing the Edinburgh St James public car park. It will be possible to turn left from Cathedral Lane towards Little King Street, and to drive straight ahead to the residential car park access ramp.

4.4 St James Place

The development proposal allows for St James Place to become two-way for vehicles between Elder Street and the access junction in to the public car park. Beyond the public car park access ramp St James Place will be one-way towards Little King Street, thus preventing access to the public car park from Little King Street and Cathedral Lane. Access to the residential car park ramp will be provided off St James Place, approximately opposite Cathedral Lane. A servicing lay-by will also be provided on St James Place on the opposite side of St James Place to Cathedral Lane and a little to the south.

The existing parking on this section of St James Place of c.4 disabled parking spaces will be removed.

The width of St James Place carriageway between its junction with Elder Street and the public car park access ramps will be 6 metres with a c.1.7 m footway on the northern side adjacent to the private car parks serving the properties on York Place. A hard-standing strip will be provided adjacent to the building to facilitate fire exit, c.1.2-1.4m in width.

4.5 **Elder Street**

The development plans allow for Elder Street to remain two-way for vehicles. South of St James Place, Elder Street will provide vehicular access to St James Square, 3 No. residents' permit parking bays and a turning head which will facilitate servicing of local properties. Elder Street also forms part of an emergency vehicle route between York Place and Leith Street via East Register Street.

Footways will be identified on both sides of Elder Street, but it is expected that it will operate as a shared surface type arrangement south of the bus station, also accommodating a cycle route between Leith Street and York Place.

4.6 **St James Square / James Craig Walk**

The area around St James Square is currently a parking and refuse bin storage area, with a vehicular route to Leith Street from the existing off-street surface level car park. The development proposals will completely re-model the Square and the space will become a high amenity pedestrian area at the entrance to the hotel development. Vehicular access to St James Square will be restricted to allow only taxis and small buses to serve the hotel. Emergency vehicle access to/from Leith Street will also be possible through St James Square.

It is expected that a number of areas within St James Square and James Craig Walk will require adoption as footway or road. The route between Leith Street and York Place will support full pedestrian and cycle access.

5. Servicing (xi)

5.1 General Servicing

A dedicated service vehicle route will be provided beneath the development, with vehicles entering through an access from St James Place via Elder Street and leaving via an exit on to Leith Street. The St James Place entry will form part of a signalised junction arrangement which is shared with the Bus Station and Elder Street. The new exit onto Leith Street will form part of a signalised junction arrangement with Greenside Row.

Three service yards will be provided along the service route, catering for all required vehicle types and loading/unloading configurations. Goods will be taken from the service yards internally to the retail units, catering units, cinema, hotel, and Apart hotel. Refuse uplifts from these uses will be made from the service yard areas. The entire route has been tested using swept path analysis and all service bays have also been tracked to ensure that vehicles will be able to manoeuvre safely and as efficiently as possible.

Properties on Multrees Walk are currently serviced from a yard which lies beneath and which is accessed from the existing St James servicing route. Harvey Nicholls also has dedicated staff and customer parking spaces located off this service yard. These facilities and access arrangements will be retained as part of the new Edinburgh St James development.

Residents of the ESJ apartments will take their own refuse to the storage area at level B1. Management will then move the bins from this area to the service yard for uplift.

A service vehicle route via Elder Street for access to Elder Street, St James Square, and James Craig Walk for refuse, deliveries etc requiring access to the development or residences on this route, has undergone tracking analysis. The analysis was carried out for the City Council's largest refuse vehicle (c.12m). It has been assumed that any service vehicles would exit via Elder Street by utilising the turning head area to be provided at the southern end.

A further service vehicle route will be provided, with entry via Elder Street from York Place and exit to Picardy Place via St James Place and Little King Street. This will serve the residential units and other properties along that route. A service vehicle lay by will be provided opposite St Andrews Hall.

5.2 Emergency vehicle access

5.2.1 Background

An analysis of emergency service vehicle access to ESJ has been undertaken. The analysis has been undertaken with reference to the '2012 Appliance Specification' and Building Standards 'Non Domestic Technical Handbook - Fire' as supplied by Fire Scotland in November 2014.

Consultation with Fire Scotland was undertaken on 11th November 2014 to agree the vehicle specifications which would need to be considered with regards to fire vehicle

access to the development. During consultation it was explained that although the vehicle specifications for each station varies Fire Scotland would expect the development to be designed to allow access for the vehicle with the largest total space requirement to be gained.

5.2.2 Guidance Specifications

A review of the guidance provided by Fire Scotland highlights the following as key factors in determining emergency routes into the development and their requirements:

- Elevations to allow a vehicle of height 4.1m access;
- Widths to allow a vehicle of 2.9m to travel within the site and vehicle clearance area of 4.88m to allow the vehicle to access equipment when stationary;
- Radii that will allow a vehicle of 13m in length to negotiate turns;
- Structures which will allow vehicles of up to 26 tonnes access;
- Vehicle access should be provided to at least one elevation of all buildings to assist in fire-fighting operations;
- The vehicle access route should be provided to the elevation or/and rescue elevations where the principal entrance, or entrances, are located; and
- Parking spaces should be provided at a distance not more than 18m from riser inlets.

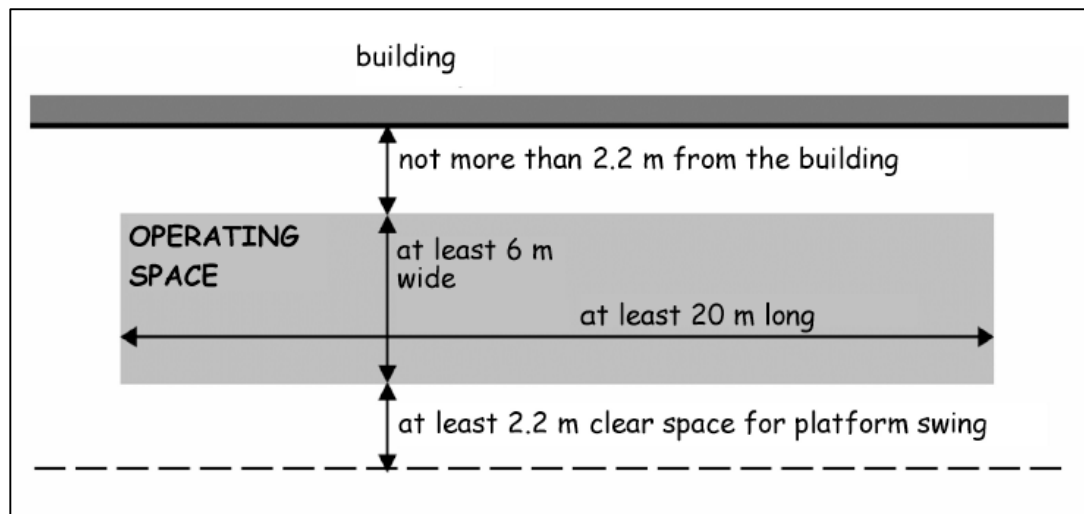
Table 5.1 below indicates the operating road space specified within the building standards 'Non Domestic Technical Handbook – Fire'.

Table 5.1 - Access Route for Fire and Rescue Service Vehicles

Access	High Reach Appliance	Pumping Appliance Only
Minimum width of road between kerbs	3.7m	3.7m
Minimum width of gateways etc	3.5m	3.5m
Minimum clearance height	4.0m	3.7m
Minimum turning circle between kerbs	26.0m	16.8m
Minimum turning circle between walls	29.0m	19.2m
Minimum axle loading	14 tonnes	14 tonnes

Following consultation with Fire Scotland it was confirmed that the development should provide access for High Reach Appliance (HRA). **Figure 5.1** below indicates the operating dimensions required for a high reach appliance, as set out within Building Standards 'Non Domestic Technical Handbook - Fire'.

Figure 5.1 - Minimum Operating Space for High Reach Appliance (Source: Building Standards 'Non Domestic Technical Handbook - Fire')



5.2.3

Service Routes

Edinburgh St James Quarter will allow emergency access to the following areas:

- The south west of the development via Elder Street;
- The south east of the development via St James Square;
- The north of the development to the north west via St James Place;
- The north of the development to the north and centre via Little King Street; and
- The east of the development via Leith Street.

Access into the development has been analysed utilising industry standard software package Vehicle Tracking for AutoCAD. The standard HRA vehicle provided within Vehicle Tracking vehicle library has been modified to replicate the 13m long vehicle utilised by Fire Scotland in the Lothian area.

Each access area has been analysed to determine where the HRA vehicle can be accommodated and where access would only be possible for general pumping appliances.

5.2.3.1

Elder Street Access

The redeveloped Elder Street will be c.4.8m wide which is above the minimum standard set within the Building Standards guidance on emergency service access. The vehicle will be able to gain access and if required utilise hard landscaped areas where 40mm upstand kerbs will be provided.

Given the width of the road and the footways adjacent to Elder Street the operating space required for an HRA vehicle will be provided along the length of the route. If required other emergency service vehicles, with less onerous, operating spaces than the HRA, will also be able to access the development and surrounding structures via Elder Street.

An emergency service vehicle will be able to park within 18m of each of the dry risers located on Elder Street.

5.2.3.2 **St James Square / James Craig Walk Access**

The redeveloped St James Square / James Craig Walk will provide a clear access route south of the hotel entrance and a c.5.2m route from St James Square south east via the new James Craig Walk to Leith Street. Note vehicular access to these areas will be restricted with the route between Leith Street and St James Square predominantly for pedestrians only.

The route widths in this area meet the requirement set out within the Building Standards guidance on emergency service access.

If required other emergency service vehicles, with less onerous, operating spaces than the HRA, will also be able to access the development via this route and access St James Square, the proposed hotel, and the properties to the south of the square. Note the exact location of dry riser inlets for the new development (27-31 James Craig Walk) to the south accessed from St James Square are unknown at this time however an emergency service vehicle will be able to park adjacent to the stepped entry to the development.

An emergency service vehicle will be able to park within 18m of each of the dry risers located on St James Square / James Craig Walk.

5.2.3.3 **St James Place Access**

Western Frontage of the Development

St James Place will allow emergency service vehicle access with kerb to kerb road widths of c.6.0m, which again is well above the minimum required with the Building Standards guidance, along the north western frontage of the development site.

An HRA vehicle will be able to operate on St James Place along the north western perimeter of the development with the required operating space provided. The section of the route which will provide the most generous operating space will be the northern end adjacent to the dry riser locations. Other emergency service vehicles will also be able to operate from St James Place and access the two dry risers located on this section of the route.

Northern Frontage of the Development

The northern section of St James Place narrows to c.3.5m in places. Due to the planned 40mm up-stand kerbs an emergency service vehicle will still be able to access this area.

Due to the narrowness of the route and the building locations an HRA vehicle will be unable to operate along the western extents of the northern frontage of the route. Other pumping appliance would however be able to operate and will be able to park within 18m of the two dry risers located on the proposed southern building allowing pumping appliance access to both the southern building and the redeveloped St Andrews House to the north.

The movement of an emergency service vehicle from Little King Street to St James Place will require the southern section of this amenity area to be kept clear of street furniture.

Little King Street

Little King Street is c.5.0m in width which combined with the planned 40mm up-stand kerbs an emergency service vehicle will be able to access the development via this route. As noted previously there is a small paved area which will need to be kept clear of street furniture to allow emergency vehicle access between Little King Street and St James Place.

The HRA operating space can be accommodated on Little King Street with the vehicle able to park within 18m of the dry riser located on this route. If the vehicle is parked towards the north of Little King Street it would be required to mount the footway area to allow the vehicle to gain access in close enough proximity to the building to operate.

The HRA vehicle will also be able to access the northern section of the central galleria link south of Little King Street and the dry risers located on this route.

Leith Street

The realigned / developed Leith Street will consist of four c.3.2m lanes, two in each direction. The HRA vehicle will be able to access the eastern extents of the development via Leith Street. Access to properties on the east of the Leith Street will remain unchanged from existing.

The space for the HRA to operate can be accommodated however if pedestrian guardrail is provided the actual locations where the HRA could operate would be limited to the areas surrounding junctions and bus stops where pedestrian guardrail is not present. It should be noted that the northern bus stop on the western side of Leith Street would not be a suitable stopping location for an emergency service vehicle as there is no dry riser within the required 18m.

5.2.4 Summary: Emergency Service Access

In summary access for emergency service vehicles will be accommodated across all main frontages of the development.

In some instances access and operating will only be possible for smaller pumping appliances however access and operation will be possible for high reach appliance to a number of locations around the development including:

- Elder Street;
- St James Place;
- Little King Street (including the central development link); and
- Leith Street.

Appendices

Appendix A - Cycle Storage Specifications

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Issue 1.1



Cycle-Works

Josta 2-Tier Bicycle Racks



doubles the storage space in shelters

The market leaders in high capacity bicycle racks, offering space efficient and cost-effective cycle storage.

- Double the capacity of bicycle storage spaces
- Easy and safe to use - with a proven track record in the UK, Europe, Australia and the USA
- Space efficient
- Flexible and adaptable
- Neat and organised
- Individual racking – one bike per space
- Low maintenance
- Patented gripping system holds bike securely
- Maximises cycle parking spaces, and allows more car parking (if required) or creates space for other uses
- Achieves cycle-parking requirements in buildings with limited space - BREEAM compliant
- Framework can be coloured in any standard RAL colour

There are many unique features of the Josta racks, including the low, easy to use handles, the clever, patented way the bikes are held on the racks, and the general ease of use.

They are also designed for a long, tough life of constant heavy use, with low maintenance. However, the most important factor is always safety, and the Josta racks are very safe to use. This is a particularly important feature for heavy bikes.



before



after

Liverpool Street Station, London

London Liverpool Street station more than doubled its awkward bike parking in a limited space, from 80 too 189, with the Josta 2-tier racks.





Josta 2-Tier Bicycle Racks

The Josta 2-tier rack is a high capacity double decker bicycle rack.

Josta is the market leader for high capacity racking systems. The racks are popular across Europe, the USA and Australia. Many bike stations in Germany, Holland and the US specify the Josta rack as standard. Cycle-Works are the UK's exclusive distributor of the Josta 2-tier rack system and have extensive experience of cycle parking including shelters, compounds, racks and bike lockers.

The Josta 2-tier sites range from small open access installations of less than 80 bike spaces (e.g. Surbiton station) to large manned cycle parks of 7000 (e.g. Leiden, NL). They are also increasingly used in the basements of new office blocks and apartments (e.g. The prestigious Foster's Albion Riverside development in Battersea).

Why the Josta rack is the market leader in high capacity bike parking

This space efficient racking system stores one bike directly above the other. It therefore increases the amount of bicycles parked (or reduces the size of the site) by up to 50%.

The rack is custom made for specific sites to maximize the cycle parking capacity, and can be used in conjunction with other systems.

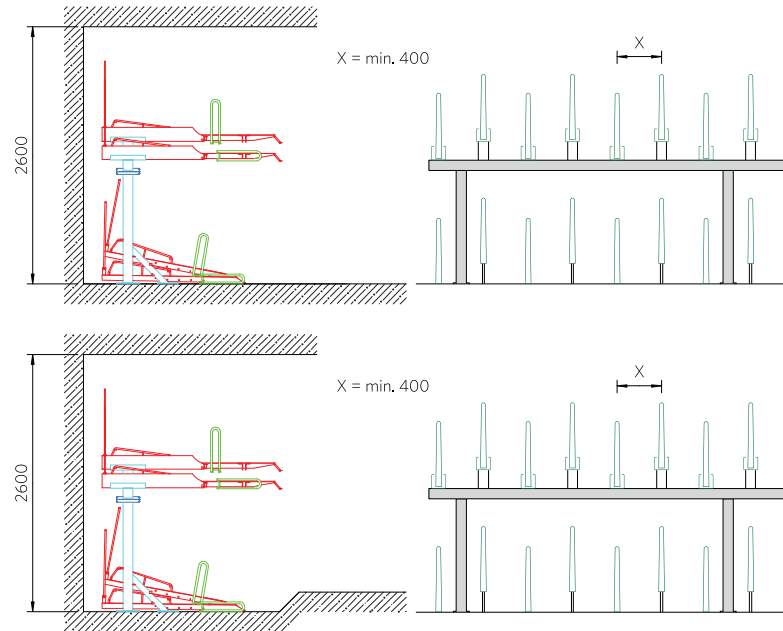
A special, patented gripping mechanism ensures that the bike cannot roll back and injure the user. We find that the top racks are usually filled first as users like to store their bike 'out of harm's way'. It is also easier to lock the bike when on the top rack. This usually leaves enough space in the bottom row for users who do not wish to use the top row.

Layout and Space Requirements

This racking system can be designed to fit your exact space. It can be used in conjunction with our other cycle parking systems to give the maximum capacity for your site.

Material options

These racks are usually galvanised with a red handle on the top racks, the framework can be powder coated in any standard RAL colour.



Site Planning

We are happy to give advice or assist you with your site planning. For this, please let us have a site plan (DWG or PDF format), clearly marked with all relevant dimensions, obstacles and access ways. Please see the next page for a guide on designing a site yourself.

Please contact us to obtain DWG files of the product layout.

Mounting/Installation

A level concrete base is usually required. This racking system is then installed by our team of experienced installers. Special supports for non-concrete sites with strong level surfaces can be supplied for a small additional charge.

Locking mechanisms and options

A security bar allows the cyclist to lock the bike frame and wheels with their own chain or D-lock. The front wheel and frame can also be locked easily.

Delivery

The current lead time is 4-8 weeks, but larger projects can require more than this. It is really beneficial if Cycle-Works are involved in the site planning as soon as possible.

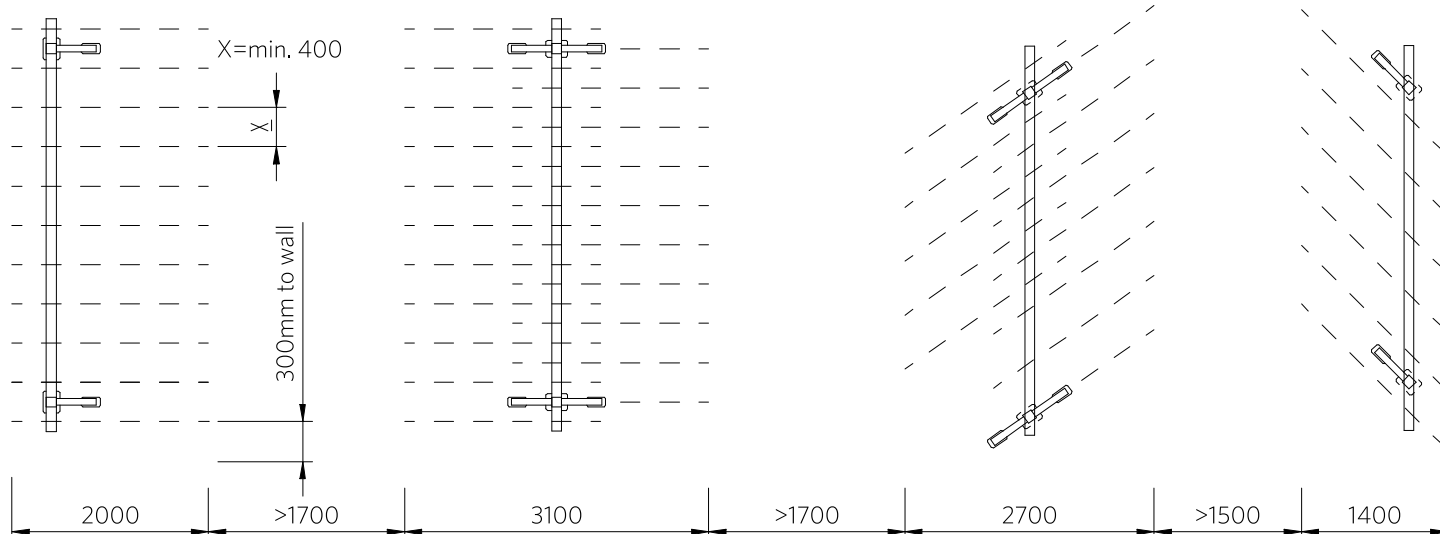
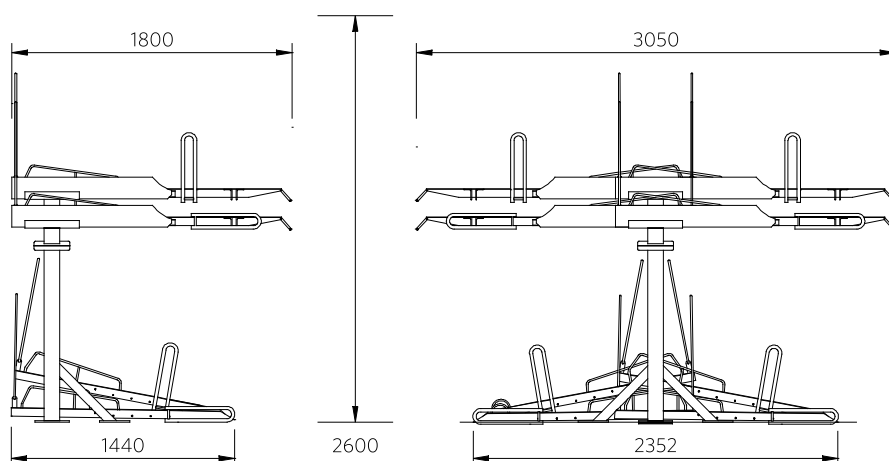
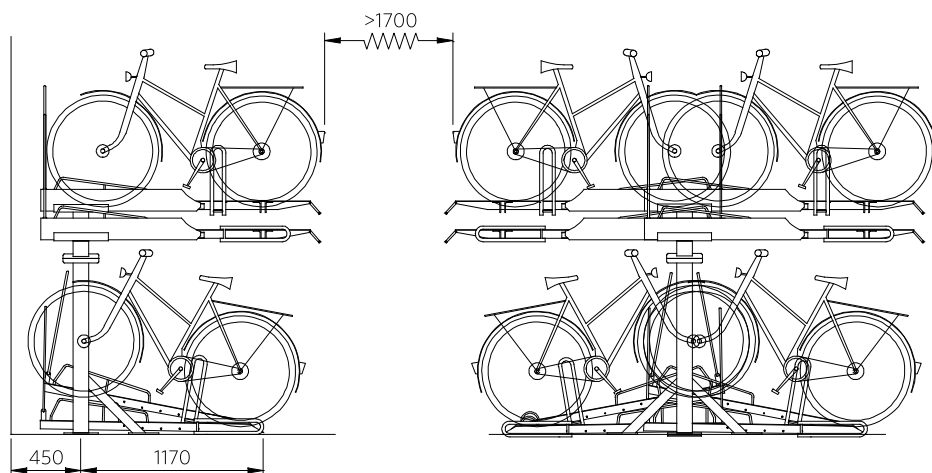




Josta 2-Tier Bicycle Racks

To design a site, please follow these guidelines

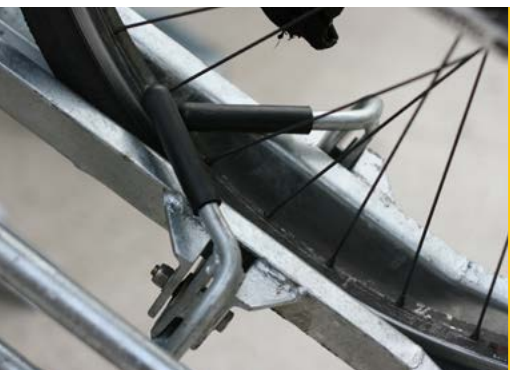
- The headroom is the most important factor for this racking system. A minimum of 2600mm is required for maximum capacity.
- Leave 300 to any adjoining side wall to give space for the handlebars.
- The racks are then spaced at a minimum of 400mm apart. We have found 450mm to be a good planning spacing, giving capacity as well as ensuring ease of use. 500mm apart is recommended where the site permits.
- Please allow 2000mm for the rack itself, plus a minimum of 1700mm in front for access. This access space can be used by the next row as well.
- The racks can also be installed from a central spine. For this option, please leave 2000mm for access on both sides. The 2-sided unit is then 3100mm wide.
- Racks can also be installed at a 45 or 55 degree angle to minimise space.





Josta 2-Tier Bicycle Racks

Innovative unique features



Wheel Gripping Mechanism

A special, patented gripping mechanism ensures that the bike cannot roll back and injure the user. As the bike is pushed into the rack the mechanism gently clamps around the front wheel. As you push the bike up the channel the front wheel is released and then back wheel is clamped securely into place.

The mechanism is very well designed and fabricated, so that if an extended rack containing a bike should be accidentally dropped the bike will be securely held in place, causing no harm to user or bike. The Josta 2-tier rack is the only 2-tier system to offer this type of safety feature.



Movable Security Bar

The Josta 2-tier rack comes with a movable high security galvanised mild steel security bar as standard. The bar is positioned at the rear of the rack in the optimum location to securely lock the rear wheel and bike frame.

When the rack is not in use the security bar is lowered down, lying parallel to the rack. It is the feature that allows the bike to be easily pushed up the channel without any obstructions for the pedals.



Pivoting Channel

The central channel that holds the bike is built around an extending, pivoting channel. It is this feature that utilises a 'sweet spot' for pivoting, allowing a full rack to be very easily lifted up and pushed back into place.

The strong box section, galvanised mild steel construction and precision engineering all ensure that this product has an extremely long and low maintenance life.

BREEAM

As with all our lockers, shelters and racks they can be used to help demonstrate compliance with BREEAM and achieve a high BREEAM rating when used in an appropriate situation.

[more info](#)

Code for Sustainable Homes

As with all our lockers, shelters and racks they can be used to help contribute towards gaining your 2 ENE8 Cycle Storage Credits when used in an appropriate situation, under the Code for Sustainable Homes.

[more info](#)

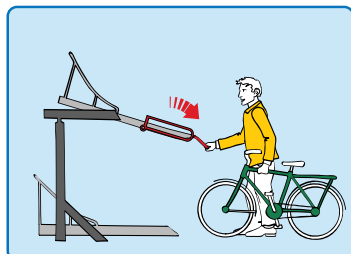




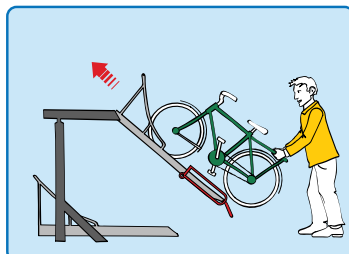
Josta 2-Tier Bicycle Racks

Store and retrieve your bike in four easy steps

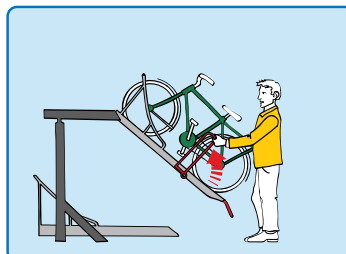
Loading your bike on to the upper racks



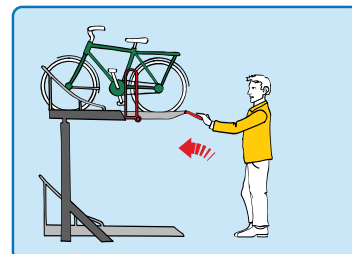
1. Pull down the upper rack.



2. Lift the front wheel onto the lowered rack and push forwards.

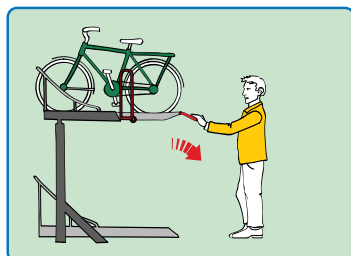


3. Raise the locking bar and lock the bike to it.

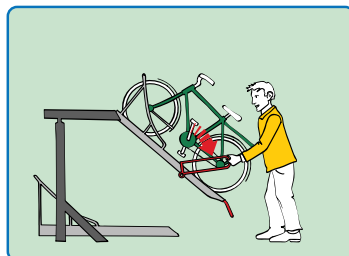


4. Lift the rack back into the horizontal position

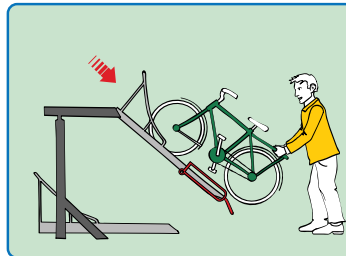
Unloading your bike from the upper racks



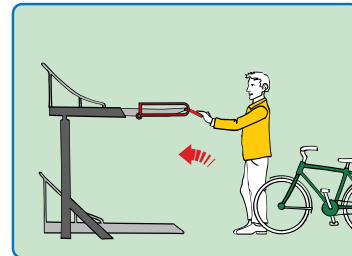
1. Pull down the upper rack, the bike will lower slowly towards you



2. Unlock the bike and lower the locking bar



3. Hold the bike and guide it backwards towards you



4. Return the upper rack to its original position

Shelters

Cycle-works can also provide a range of quality shelters and compounds to complement the Josta 2-tier rack. These can be customised as required.

Shelter height

2700mm recommended
2600mm minimum



[more info](#)

Higher Kennet, East Croydon train station



[more info](#)

Higher Solent, Euston train station



[more info](#)

Medway Shelter, St George's Hospital



[more info](#)

Medway Compound, St George's Hospital



[more info](#)

Berlin Lockable Compound

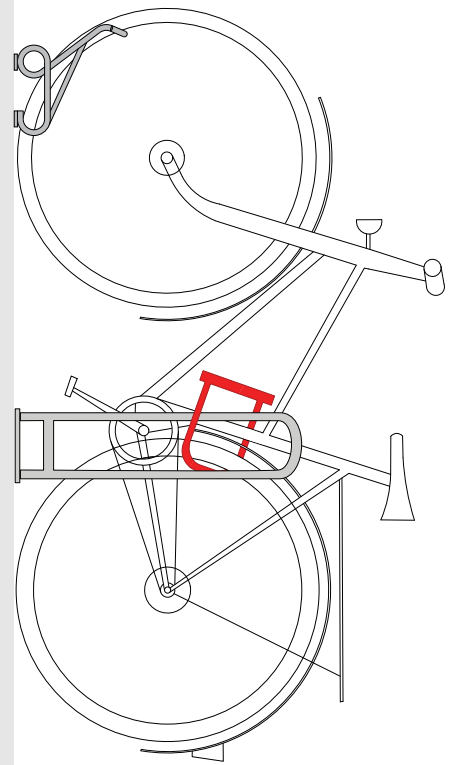




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The Cycle Storage Specialists

Josta® Wall Rack



Overview

This functional and well-designed wall mounted rack holds the bicycle securely in place, while the (optional) security bar provides a extra locking point for the bike frame.

The rack can be installed where space is at a premium or where it is impossible to mount a rack to the ground. The bicycle can be stored vertically or horizontally, depending on the height the rack is installed at. This results in neat and organised individual parking.

Features & Benefits

- Small footprint
- Can store the bicycle vertically or horizontally
- Neat and organised individual parking
- 90, 60, 45 and 30 degree angles available
- The bike is stable while it is being locked
- Security bar provides locking points for the bike frame



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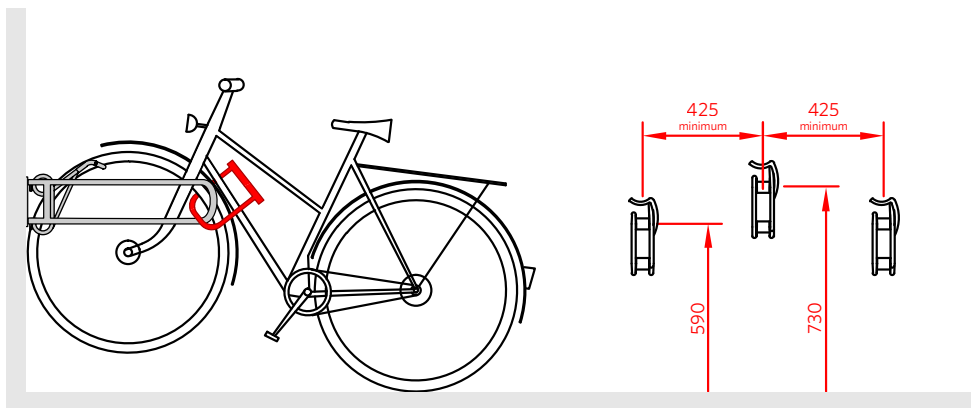
The Cycle Storage Specialists

Josta® Wall Rack

Hanging Positions

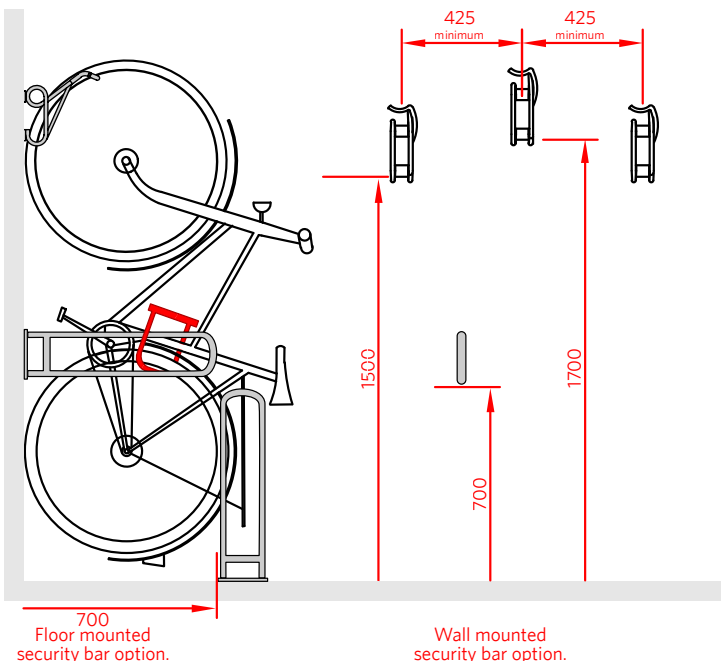
The Josta Wall Rack can be installed to park bikes in either a horizontal or vertical position. In both positions the racks should be vertically staggered to enable bicycles to be parked without handlebars or cables becoming entangled. The minimum recommended separation between racks is 425mm. Different centre spaces are available, please contact us for more information.

Horizontal Parking



For horizontal parking racks are installed alternately at heights of 590mm and 730mm above the ground. The locking bar, if used, integrates with the rack giving a locking point for the front wheel and the frame.

Vertical Parking



For vertical parking racks are installed alternately at heights of 1500mm and 1700mm above the ground from the bottom of the Wall Rack fixing plate.

Security



The Josta Wall Rack can be supplied with an optional security bar to provide a secure locking point. This bar can be installed on the wall or ground between racks. In the latter case one security bar can serve two racks. If each rack has its own bar, then it is 700mm from the ground for the lower rack, and 900mm for the higher rack. The security bar can also be installed on the floor between the racks, 700mm away from the wall.

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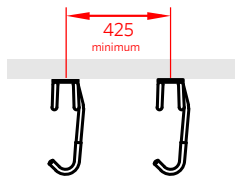


Josta® Wall Rack

Angled Mounting

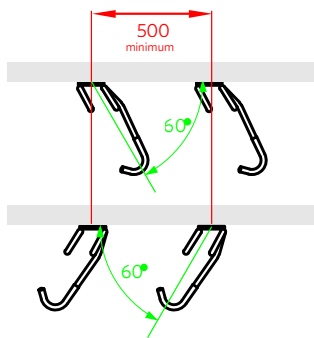
The Josta Wall Rack can be supplied to mount at 90 or 60 degrees to the wall adapter blocks can be provided to give angles of 45 or 30 degrees. Mounting at an angle reduces the projection of bikes into the surrounding space but means that the spacing between racks must be increased.

Mounting at 90°



The standard way of mounting the Wall Rack is at 90 degrees to the wall. This allows the centres of the racks to be spaced at 425mm and means that a standard bike will project about 1100mm from the wall.

Mounting at 60°

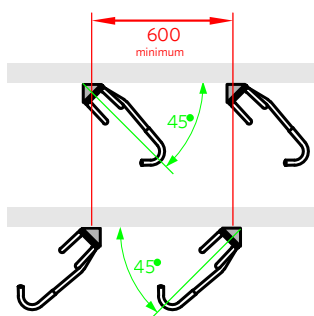


A variant of the Wall Rack allow bikes to be parked at 60 degrees to the wall. This means the centres of the racks have to be spaced at least 500mm apart.

Using 60 degree Wall Racks reduces the projection of standard bike to approximately about 950mm from the wall.

The Rack can be supplied so that the angle faces the left or the right.

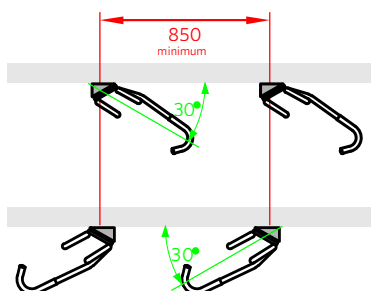
Mounting at 45°



Using an adapter block allows the standard Wall Rack to be mounted at 45 degrees to the wall. In this configuration the centres of the Wall racks must be spaced at 600mm. At this angle the projection of a standard bike is reduced to approximately 780mm.

The rack can be installed to face the left or the right by turning the adapter block over.

Mounting at 30°



Using an adapter block allows the 60 degree Wall Rack to be mounted at 30 degrees to the wall. In this configuration the centres of the Wall racks must be spaced at 850mm. At this angle the projection of a standard bike is reduced to approximately 550mm.

The rack can be supplied so that the angle faces the left or the right.



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Josta® Wall Rack

Framework

The popular and easy-to-use Josta wall rack can be mounted onto frameworks for sites where it is impossible to fix the rack to the wall.

The frameworks are usually used for sites where the walls are too weak to bear the full weight of the bike, or where the wall cannot be drilled into due to leasing arrangements or for cosmetic reasons.

These sturdy and well-constructed frameworks and racks hold the bicycle securely in place, while the (optional) security bar provides a locking point for the bike frame. This results in neat and organised individual parking.



Layout and Space requirements

The dimensions of the frameworks are adjusted to fit your specific site. The racks are staggered in height and spaced at 425-450mm. Please allow 300mm to the left and right for the handlebars of the first bike. 90, 60, 45 and 30 degree angles are available, orientation to the left or right.

Mounting/Installation

The racks and bars are fixed to the framework. The framework is then bolted to the ground.



Material options

The frameworks are made of 100mm mild steel box section, which is then galvanised. The wall racks are made of 14mm diameter galvanised steel bar. They are usually galvanised but can also be powder coated.



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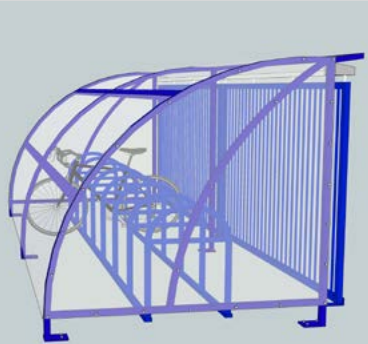




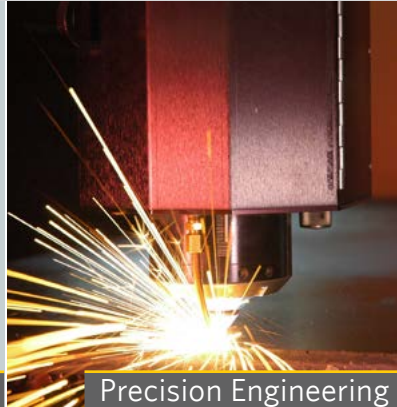
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3D Visualisations



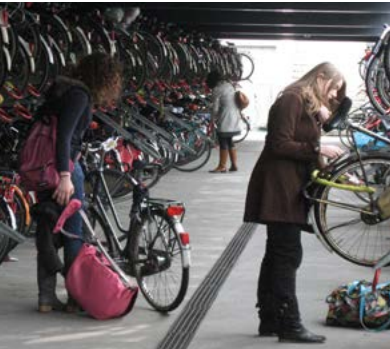
Precision Engineering



Powder Coating



Professional Installation



Commercial / Residential



Healthcare



Rail

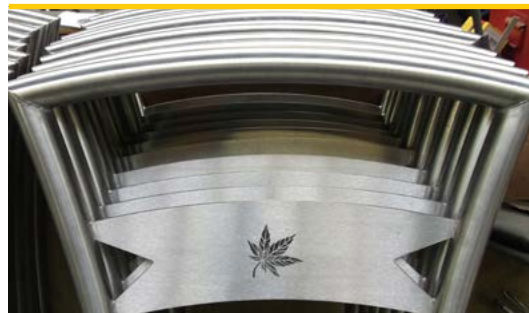


Education

About Cycle-Works

Cycling is our passion. We believe that cycling is good for people, good for society and good for the environment. This belief underpins everything we do. We believe that the provision of quality facilities will increase the use and acceptance of the bicycle.

All our employees and associates cycle regularly in diverse disciplines such as commuting, touring and long distance audax rides. We are active in both local and national cycle campaigning.



Our Products

- Individual bicycle lockers
- High capacity 2-tier racks
- Open access and lockable shelters
- Wide range of individual racks
- Vertical and horizontal racks



Our Services

- Initial site visits
- Advice on product selection
- Consultation on your plans
- Full delivery and installation
- Aftercare and maintenance



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Rounded A Rack



Dimensions in mm

Height	950
Width	600
Tube	48 dia.



Overview

The modern and stylish "Rounded A" rack is designed to complement traditional and contemporary architecture. It holds the bike well, with the top of the rack between the saddle and front stem, which keeps the bike stable. The rack style and dimensions encourages the user to lock the bicycle frame and front wheel to the rack.

The horizontal bar provides extra locking points, enhanced security and additional advertising potential. Mountain bikes and smaller children's bikes particularly benefit from this lower horizontal bar. One size fits both childrens and 'full-size' bicycles, as well as mountain bikes, ladies bikes, and other styles.

From the newly published 2014 London Cycle Design Standards about our Rounded A rack

"There are advantages in having an additional cross bar on the stand. This enables a wide range of bike frames and sizes to be conveniently and securely locked, and prevents the lock slipping."

Features & Benefits

- Holds the bike upright
- Offers greater security than standard racks
- Adds convenient locking points
- Recommended in planning guides
- Fits adult and child size bikes
- Range of mounting options
- Range of finishing options
- Additional advertising potential

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Rounded A Rack

Mounting Options



Toast Rack

Racks are supplied welded to metal rails and bolted to the ground using 110mm bolts. Toast racks can easily be moved if required.



Surface Mounted

Surface mounted racks are bolted to good quality concrete using 100mm bolts.



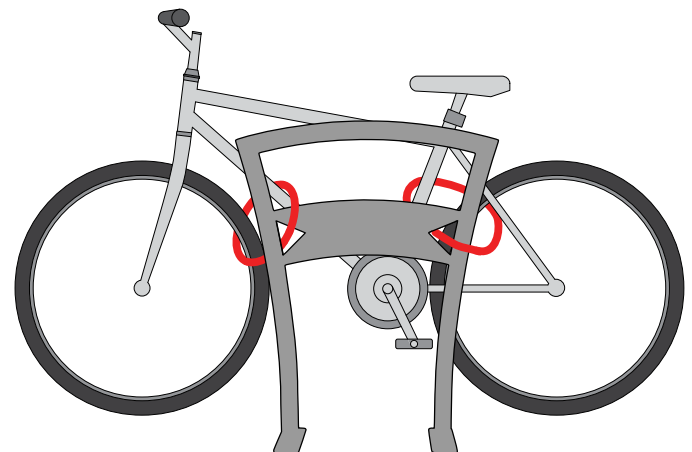
Embedded

Racks can be embedded into concrete to a depth of 300mm. The legs of the rack are fitted with a lip or peg to prevent lifting.

Securing Your Bike

Ideally the bike frame and both wheels should be locked to the stand with two locks. If only one lock is available it is recommended that this is used to secure the front wheel (as this is the easiest to remove) and the frame to the stand.

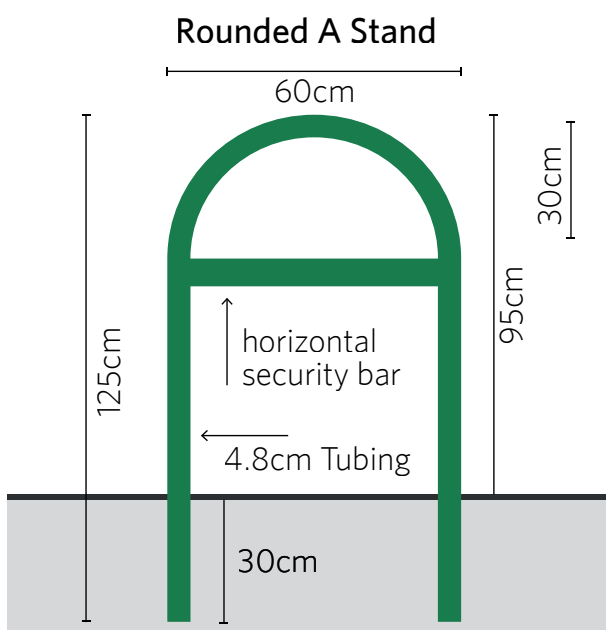
Locks should pass through the stand above the locking bar or through any locking points cut into the security bar. Remember to remove accessories, such as lights, from your bike.



Dimensions & Spacing

In order to achieve the best use of space without making the racks difficult to use it is vital to carefully consider the spacing of your racks. These guidelines should help you.

Measurements given here are for a single row of racks. If you are installing multiple rows then the minimum spacing between side-by-side racks should be increased from 75cm to 1000cm to allow users to wheel bikes between racks.



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Rounded A Rack

Materials



Stainless Steel

Stainless steel gives a beautiful non rusting polished finish that looks great in all surroundings. We recommend Marine grade 316 stainless steel, but other grades are also available. Stainless Steel is also easy to recycle and has an approximate recycled content of 60%.



Galvanised and Nylon-Coated

An excellent long-lasting finish that won't damage a bike's paintwork. This finish is available in most RAL colours. The rack is galvanised before being coated to provide maximum protection against corrosion.



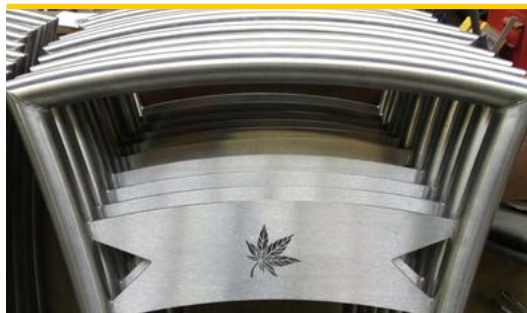
Galvanised

This low cost finish gives effective corrosion protection for ten to fifteen years. The look is industrial and utilitarian. Galvanised products can easily be re-galvanised, this greatly increases the overall life of the product and value. It is also easy to recycle and is made from recycled materials.

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