

BICYCLE PARKING



INFRASTRUCTURE GUIDELINES



PO Box 23675
Pleasant Hill, CA 95423
www.511contracosta.org

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INTRODUCTION

While selecting the exact placement of bicycle parking infrastructure* is a fairly easy process, there are many factors to consider, from right-of-way, site readiness, access issues, permits, spatial requirements, infrastructure selection, liability, and demand.

This guide will assist you in determining the placement, costs, and type of bicycle parking most appropriate for your site. 511 Contra Costa provides limited funds to acquire the bicycle parking infrastructure (rack, locker, lid). All costs associated with site preparation, installation, insurance, and permitting is the responsibility of the site host.

An agreement prior to the acquisition of the bicycle parking infrastructure will be necessary between the site host and 511 Contra Costa. Please call the 511 Contra Costa office at 925-969-1193 for further information.



**In this document "infrastructure" refers to secured bicycle parking including bike racks, bike lockers, bike lids, etc.*

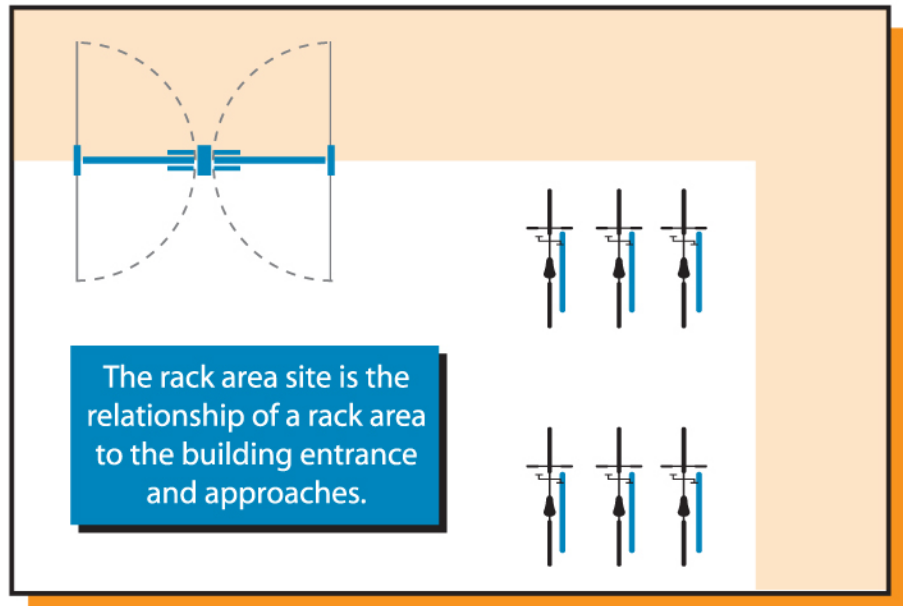
BIKE PARKING LOCATION/PLACEMENT

The location of bicycle parking in relationship to the site it serves is very important when deciding on the placement of your future racks or lockers. The best location for bicycle parking is immediately adjacent to the entrance it serves. Bicycle parking should be located as close as or closer than the nearest car parking space to the main entrance. Bicycle parking infrastructure should not be placed so that it blocks the entrance or inhibits pedestrian flow in or out of the site. In addition, bike parking that is far from the entrance, is hard to find, or perceived to be vulnerable to vandalism will not be used by most cyclists.



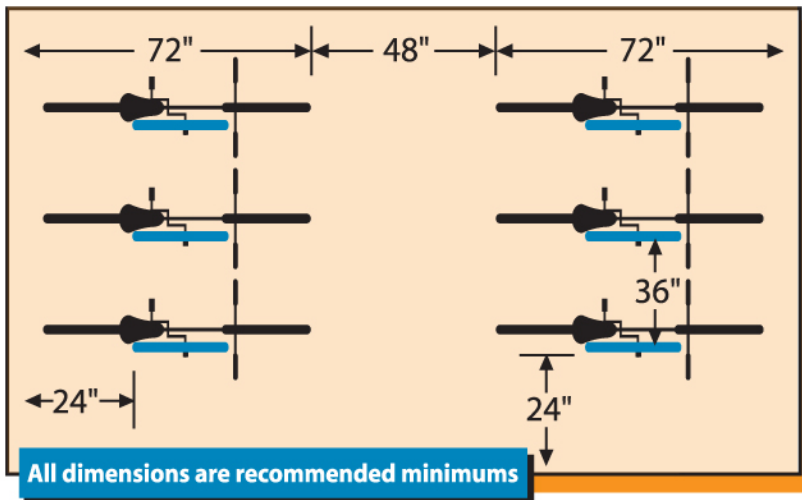
Many sites will have one central location where bikes are parked. However, if your site has several entrances, it is often more effective/convenient to place smaller racks at multiple entrances.

The rack should be located along a major site approach line and clearly visible from the approach. The rack should be no more than a 30-second walk (120 feet) from the entrance it serves and should preferably be within 50 feet.



In the case of a bike rack, at some point the cyclist stops, dismounts, and walks the bike to the rack. The bicycle is attached to the rack and any cargo is removed. The cyclist now walks to the building carrying the cargo. Adequate space must be provided to allow for this transition.

RACK SPACE REQUIREMENTS



Six feet (72 inches) of depth should be allowed for each row of parked bicycles. Conventional upright bicycles are about 72 inches long and can easily be accommodated in that space. Some rack types will allow the racks to be mounted closer to a wall. This will not change the space required by the bicycle or the aisles.



If possible, the rack area should be protected from the elements. Even though cyclists are exposed to the elements while en route, covering the rack area keeps the cyclist more comfortable while parking the bike, locking it, and loading or unloading cargo.

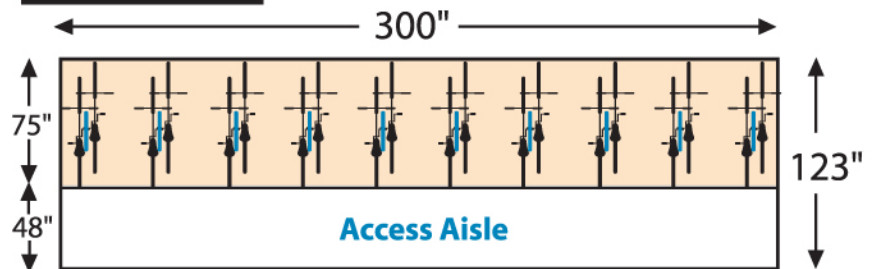
CAPACITY AND SPACE USE

Once you have determined the number of bikes the site will need to accommodate, you can use the diagrams below as a guide for recommended space needs.

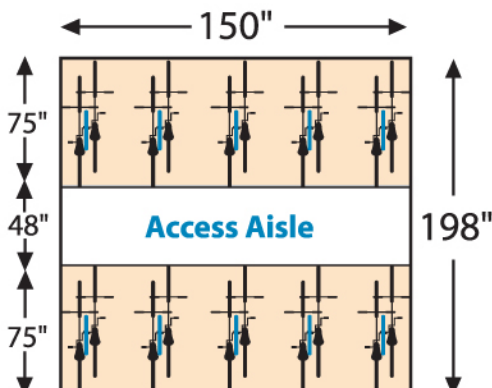
Recommended spacing:

Depends on a number of factors. A typical bike needs an area of approximately 1 ft x 6 ft to park efficiently and still allow easy access to each bike. Use the diagrams as a guide for your particular space needs.

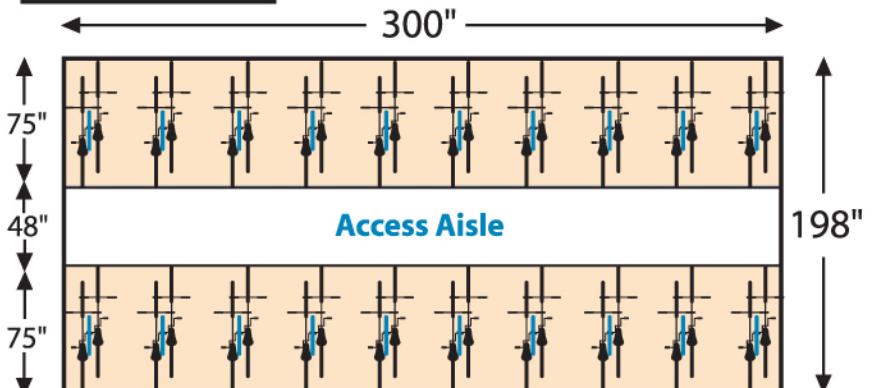
20 Bikes - 1 Row



20 Bikes - 2 Rows



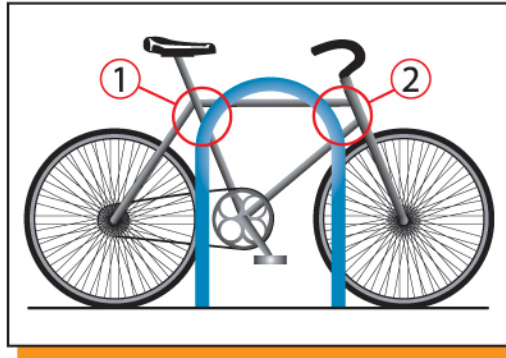
40 Bikes - 2 Rows



THE RACK

The rack should:

- Support the bicycle upright by its frame in two places
- Enable the frame and one or both wheels to be secured
- Prevent the wheel of the bicycle from tipping over
- Support bicycles without a diamond-shaped frame with a horizontal top tube

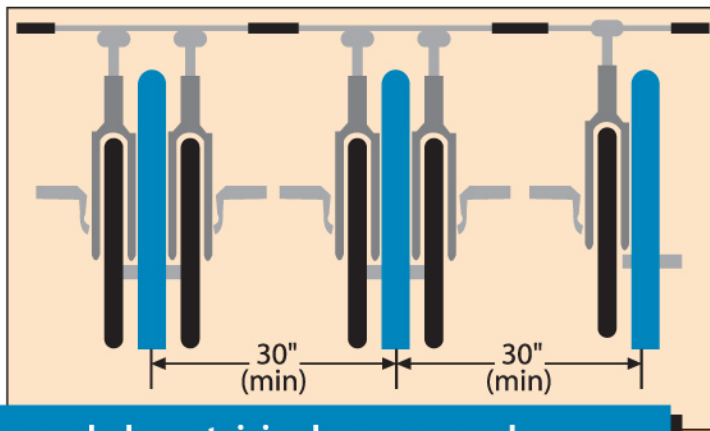


A U-lock should be able to lock the front wheel and the down tube of an upright bicycle or the rear wheel and seat tube of the bicycle.

The rack should be anchored so that it cannot be stolen with the bikes attached. Vandal-resistant fasteners can be used to anchor a rack in the ground.

Comb, toast, wave, school-yard and other wheel-bending racks that provide no support for the bicycle frame are NOT recommended

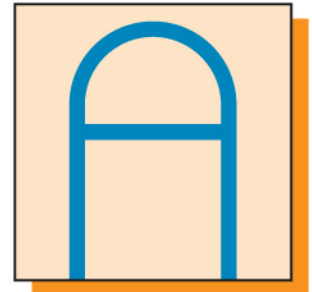
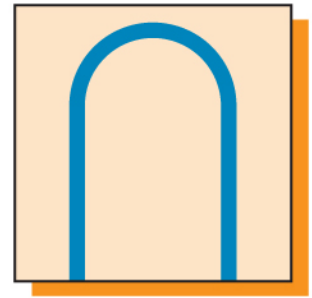
The rack should provide easy, independent bike access. Inverted "U" rack elements mounted in a row should be placed on 30" centers. This allows enough room for two bicycles to be secured to each rack element.



A rack is one or more rack elements joined on a common base or arranged in a regular array and fastened to a common mounting surface.



Normally, the handlebar and seat heights will allow two bicycles to line up side-by-side if one of them is reversed. If the rack elements are placed too close together, it becomes difficult to attach two bikes side-by-side.

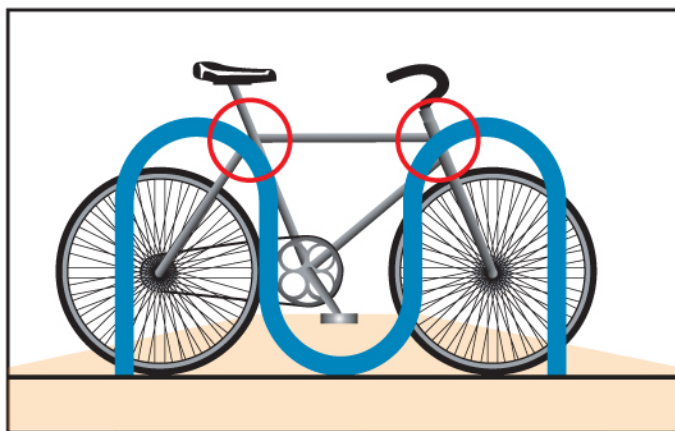


THE RACK (CONTINUED)

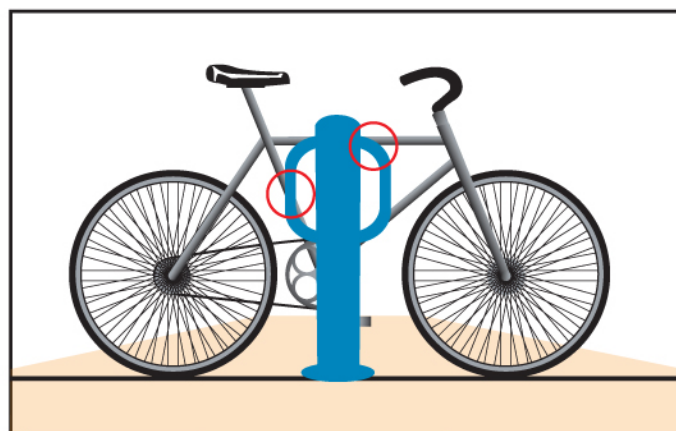


Properly installed inverted "U" racks allow for more bikes to be correctly secured in the same amount of space .

A bike secured correctly with two points of contact allows for two bikes to be parked on either side of a wave rack .



Like inverted "U" racks, bollard racks allow for two points of contact to properly park a bike.



A bike parked perpendicular to the rack allows for more bikes, however the bikes are incorrectly supported with only one point of contact.

