

BICYCLE PARKING

Every bicycle trip has two main components: the route selected by the bicyclist and the “end-of-trip” facilities at the destinations, such as safe and secure bicycle parking. This section provides guidance on the provision and placement of safe, secure, and convenient bicycle parking facilities.

As the Redmond bicycle network grows, so will the population that chooses to ride a bike. The availability of secure and convenient parking is critical to bicyclists. The availability of short and long-term bicycle parking at key destinations such as parks, schools, community facilities, transit stations, and Centers is a vital part of a complete bicycle network.

Parking should be highly visible, accessible and easy to use. Facilities should be located in well-lit areas and covered where possible. They should not interfere with pedestrian flows. Installation is equally important; for example a rack that is too close to a wall or other obstruction will not be effectively utilized. See the figures on the following pages for design specifications.

There are different types of parking facilities just as there are different levels of bikeway facilities. Parking facilities fall into one of three main categories:

Bicycle Racks

Bicycle Racks are low-cost devices that provide a location to secure a bicycle. Ideally, bicyclists can lock both their frame and wheels. The bicycle rack should be in a highly visible location secured to the ground, preferably within 50 feet of a main entrance to a building or facility. Whenever possible, the racks should be visible from the doorways and/or windows of buildings, and not in an out of the way location, such as an alley. Short-term bicycle parking is commonly used for short trips, when cyclists are planning to leave their bicycles for a few hours.



Covered bike racks protect bicycles from rain and other elements.

Bicycle Rack Materials

Stainless steel

Requires no coating and is attractive and virtually maintenance-free, but it is typically the most expensive material.

Vinyl coating

Can be somewhat more expensive than other options, but is one of the best when aesthetics and durability are considered. Vinyl requires minimal maintenance.

Vinyl coatings are the most user-friendly of all the options because they will not scratch bicycles the way harder coatings will.

Powder coating

An excellent option because it allows all of the same color options as paint, but is very durable. Powder coating is usually the same cost as galvanized.

Galvanized coatings

Durable and much less expensive than stainless steel, but galvanized racks are not typically considered as attractive as other options.

Paint

Economical, but is not as durable as the other options. This is a major issue in the Puget Sound region where metal surfaces are subjected to alternating cycles of heavy rain in the winter months and heat in the summer.

Stock

Whenever possible, racks should be constructed from square metal stock, since round stock may be vulnerable to pipe cutters.

The most common mistake in installing bike racks is placing them too close to a wall or fence, or orienting them the wrong way, rendering the rack unusable; nor should they impede pedestrians. In addition, in order to accommodate a range of bicycle styles and sizes, racks must be installed to allow sufficient space between bicycles and between racks.

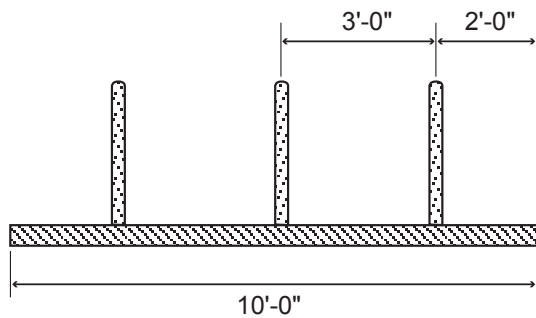
If there are two or more rack spaces (also known as “elements”) in a single rack, there must be a minimum of 30 inches center to center between bicycle tires when bicycles are locked side to side; otherwise, the handlebars of one bicycle can prevent another bicycle from parking in the adjacent space.

In addition to optimizing space by situating adjacent bicycles a sufficient distance apart, bicycle racks must be installed to allow sufficient space for bicyclists and their bicycles to move about between racks. In most cases, a standard bicycle footprint is six feet long. Aisles between rows of racks must be a minimum of four feet wide.

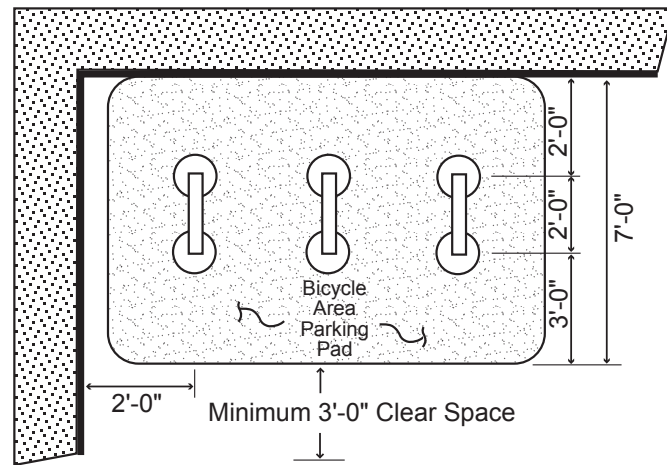
For security, bicycle racks should always be installed in concrete. If concrete is infeasible, asphalt is acceptable on rare occasions. Soil is never acceptable. There are two primary types of bicycle rack installation: surface mount and cast in place. Either is acceptable, but for certain rack models, only one installation type will work.

Surface mount is appropriate where racks are being installed onto an existing concrete slab. Anti-tampering bolts and other hardware should be used to prevent theft of the whole rack. If an asphalt substrate is all that is available, concrete footings should be poured.

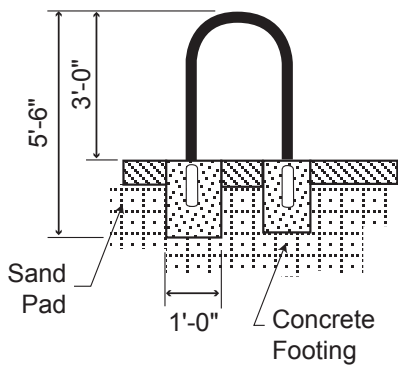
Cast-in-place is the best option for security purposes, but may be impossible if the rack installation location already has a slab poured or if the chosen rack type does not provide a cast-in-place option. Cast-in-place installation is appropriate for either asphalt or concrete.



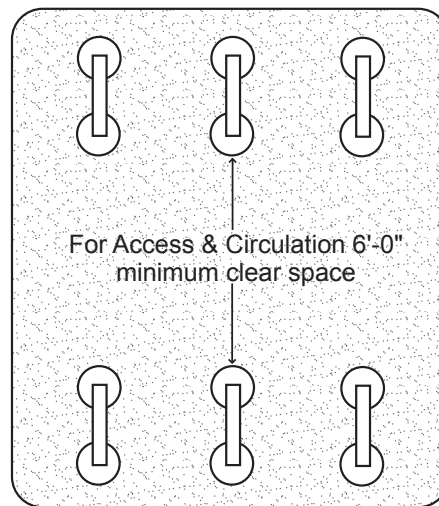
PROFILE VIEW



PLAN VIEW



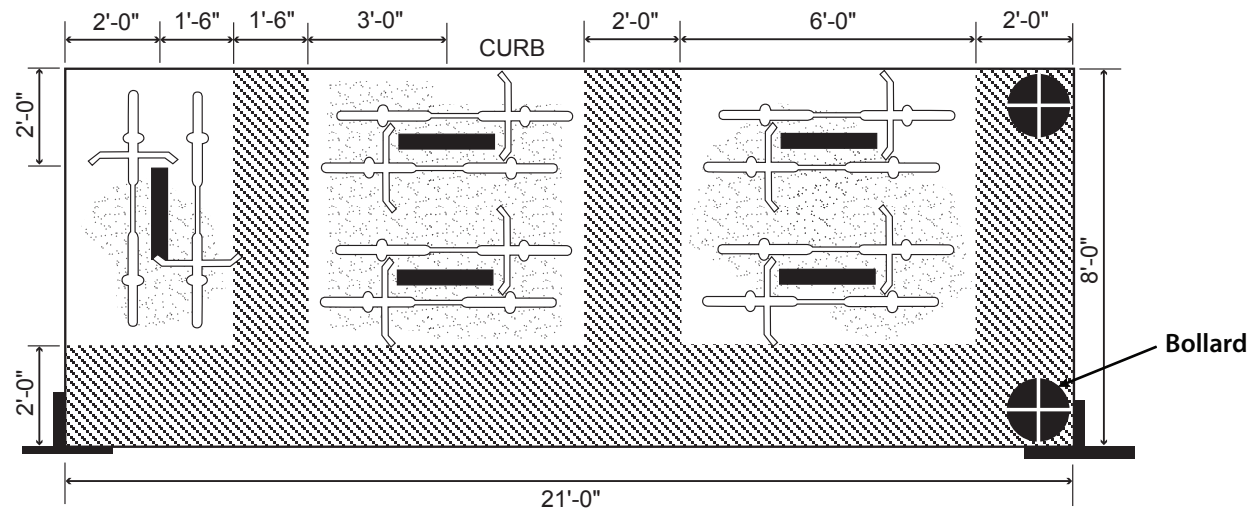
SIDE VIEW




PLAN VIEW WITH MULTIPLE ROWS



Bicycle parking layout for end parking space



 Buffer zone between parked/moving cars and bicycle parking

Bicycle parking layout for internal parking space

