

bike alameda *Bike parking recommendations*

There are four main types of bike parking – racks, lockers, corral or cage and valet bike parking.

Bicycle Racks

Location:

Freestanding bike racks can be placed on the edge of a sidewalk, near the entrance to a building, or in-street. Should be located within 50 feet (and no more than 120 feet) of the main entrance of the destination they serve. They should be placed in a visible area with significant foot traffic and, if possible, under an awning to provide protection from the weather. Bike racks in the back of parking lots is not allowed. Bicyclists should not have to traverse a parking lot either before or after parking their bikes.

Rack Clearance:

It is important to follow the manufacturer's clearance specifications, so that the racks are usable for all bicyclists. Racks should be located with at least 30" of clearance in all directions from all vertical obstructions, including other racks and landscaping.

Rack Type:

Inverted "U" racks are strongly recommended because they provide two points of contact with the bicycle and allow the frame and both wheels to be locked to the rack. Inverted "U" racks may include multiple loops fastened to a single "footer." See other side.


Businesses and business districts are encouraged to install fun and innovative bike racks, as long as they meet the above criteria for use.

1. THE RACK ELEMENT

Definition: the rack element is the part of the bike rack that supports one bicycle.


The rack element should:

- Support the bicycle upright by its frame in two places
- Prevent the wheel of the bicycle from tipping over
- Enable the frame and one or both wheels to be secured
- Support bicycles without a diamond-shaped frame with a horizontal top tube (e.g. a mixte frame)
- Allow front-in parking: a U-lock should be able to lock the front wheel and the down tube of an upright bicycle
- Allow back-in parking: a U-lock should be able to lock the rear wheel and seat tube of the bicycle




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


The rack element should resist being cut or detached using common hand tools, especially those that can be concealed in a backpack. Such tools include bolt cutters, pipe cutters, wrenches, and pry bars.




INVERTED "U"
One rack element supports two bikes.




"A"
One rack element supports two bikes.




POST AND LOOP
One rack element supports two bikes.



COMB
One rack element is a vertical segment of the rack.



WAVE
One rack element is a vertical segment of the rack. (see additional discussion on page 3)



TOAST
One rack element holds one wheel of a bike.

Not recommended





Onesie



twosie

Bicycle Lockers

Compared to racks, lockers provide superior security but require additional space. Because of the added security the lockers provide, many people choose to bike and shop only when given the choice of a locker.

Location: Like racks, lockers should be located in visible areas that are easily accessible. Every three blocks, according to Portland standards, bicycle commuters are willing to walk a short distance for secure parking. The area should be well lit. bicycle into the locker.

Bicycle Cages / corral

This parking is most appropriate for large-scale employee parking and in parking garages and on school grounds. They should be located near entrances in visible locations, especially when included in parking garages. Cages are defined as an enclosed area with bike racks. Access to the area is limited by key or electronically and bikes are individually locked inside.

Cage Size: For security purposes, small cages are preferred to limit the number of people with access to any single cage. Multiple small cages should be considered for high-demand locations. For example, a single cage of 18' x 20' occupies the same footprint as two standard parking stalls (of 9' x 20' each) (American Association of State Highway and Transportation Officials 2004, p. 371). Such a cage can accommodate a center aisle between two rows of seven "U" racks each. Assuming two bicycles per rack, such a cage can accommodate up to 28 bicycles in the same footprint at two cars.

Rack Clearance: Within a cage, "U" racks should be spaced 2.5' from each other and the walls of the cage. The center aisle should allow a minimum 4' of unobstructed space between the facing rows of parked bicycles while a 5' aisle is recommended. These specifications are consistent with the 18' x 20' cage described above that includes 14 "U" racks.

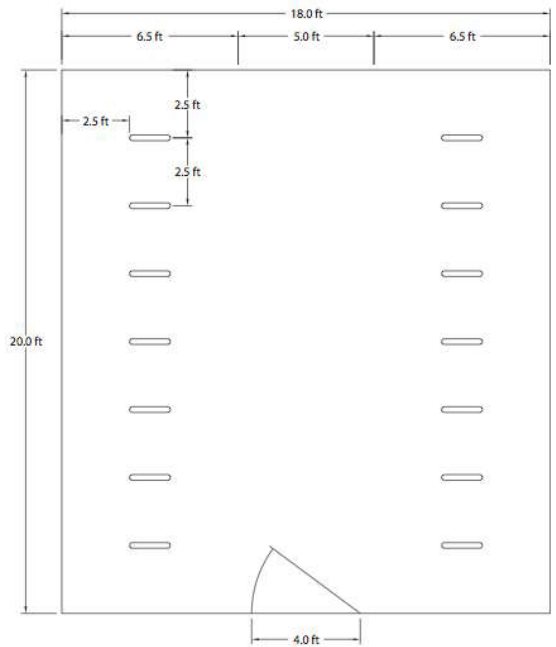


Figure 5.6: Bicycle Cage for 28 Bicycles (18' x 20'). This bicycle cage occupies the same footprint as two standard parking spaces of 9' x 20' each.



Rack by Bike Security Racks Co., Inc. Front wheel and frame can be securely locked.

Vertical storage.

Bicycle Parking Quantity

Table 2—Bicycle Parking Requirement Recommendations

Use	Required Number of Bicycle Spaces (1) (2)
Residential (such as apartments and townhouses) and General, multi-dwelling	1 Class I/3 units + 1 Class II/15 units
Students, low-income families, multi-dwelling	1 Class I/2 units + 1 Class II/15 units
Residents 62 and older, multi-dwelling	1 Class I/30 units + 1 Class II/30 units
Schools	
Elementary, middle, high schools	1 Class I/30 employees ⁽³⁾ + 1 spot/12 students (50% Class I and 50% Class II)
Colleges, Student residences	1 Class I/4.5 beds + 1 Class I/30 employees
Academic Buildings and other university facilities	1 Class I/30 employees ⁽³⁾ + 1 spot/9 student seats (25% Class I and 75% Class II)
Park-and-Ride Lots/Parking Garages	7% of auto parking (75% Class I and 25% Class II)
Transit Centers	5% of daily boarding (75% Class I and 25% Class II)
Cultural/Recreational	
Libraries, theaters, museums, religious institutions	1 Class I/30 employees + 1 Class II/1500 sq. ft. or 1 Class II/60 seats (whichever is greater)
Parks/Recreational Fields	1 Class I/30 employees + 1 Class II/9 users during peak daylight times of peak season
Retail Sales/Shopping Center/Financial	1 Class I/30 employees + 1 Class II/6000 sq. ft.

Use	Required Number of Bicycle Spaces (1) (2)
Institutions/Supermarkets	
Office Building/Offices	1 space/6000 sq. ft. 75% Class I and 25% Class II.
Hotels/Motels/Bed & Breakfasts	1 Class I/30 rooms + 1 Class I/30 employees
Hospitals	1 Class I/30 employees + 1 Class I/45 beds
Restaurants	1 Class I/30 employees + 1 Class I/3000 sq. ft.
Industrial	1 Class I/30 employees or 1 Class I/15,000 sq. ft (whichever is greater) + 1 Class II/15,000 sq. ft.
Day Care Facilities	1 Class I/30 employees + 1 Class II/75 children
Auto-Oriented Services	1 Class I/30 employees
Other uses	Same as most similar use listed

Valet Bicycle Parking

For events greater than 100 participants, monitored bicycle parking is very effective in keeping car parking needs low and encouraging biking to events. Monitored bike parking is similar to a coat check. Bikes are stored in an enclosed area and watched. Bicyclists receive a receipt to retrieve their bikes. This works well with volunteers.

1. Have one or two attendants to take greet the bicyclists and park their bikes.
2. Bikes should be parked on bike racks, if needed
3. a check-in system with a receipt is ideal, so the bicyclists can claim their bike.