



City of Cambridge

Bicycle Parking Guide



DEVELOPMENT REQUIREMENTS

For new development and redevelopment projects, bicycle parking must be provided in accordance with zoning requirements. Locations and types of bike parking must be shown in building site plans and approved by the Traffic, Parking and Transportation Department and the Community Development Department. Ensure that your bike racks are approved and well used by following these guidelines.

City of Cambridge Zoning Ordinance

For the latest and most accurate information, please access the ordinance online at www.cambridgema.gov/cdd; by e-mail, bikeracks@cambridgema.gov, or by phone 617/349-4604. A hard copy can be obtained at the City Hall Annex at 344 Broadway, Cambridge, MA.

As of the publication of this guide, zoning specifications for bike parking within the City of Cambridge are outlined in Article 6.000 of the Zoning Ordinance.

The following is a summary of the City's requirements:

- 6.11** "...The parking standards contained herein are intended to encourage public transit, bicycle usage and walking in lieu of automobiles..."
- 6.37.1** "For multifamily residences there shall be one bicycle space or locker for each two dwelling units or portion thereof."
- 6.37.2** "For all other uses, except those exempted in Subsection 6.37.4, there shall be one bicycle parking space for each ten (10) automobile parking spaces or fraction thereof required in Subsection 6.36."
- 6.49.1** "Each bicycle parking space shall be sufficient to accommodate a bicycle at least six (6) feet in length and two feet wide, and shall be provided with some form of stable frame permanently anchored to a foundation to which a bicycle frame and both wheels may be conveniently secured using a chain and padlock, locker or other storage facilities which are convenient for storage and are reasonably secure from theft and vandalism. The separation of the bicycle parking spaces and the amount of corridor space shall be adequate for convenient access to every space when the parking facility is full."
- 6.49.2** "When automobile parking spaces are provided in a structure, all required bicycle spaces shall be located inside that structure or shall be located in other areas protected from the weather. Bicycle parking spaces in parking structures shall be clearly marked as such and shall be separated from auto parking by

some form of barrier to minimize the possibility of a parked bicycle being hit by a car."

- 6.49.3** "Bicycle parking spaces shall be located near the entrance of the use being served and within view of pedestrian traffic if possible, and shall be sufficiently secure to reasonably reduce the likelihood of bicycle theft."

WHY IS BIKE PARKING IMPORTANT?

The City of Cambridge promotes bicycling as a healthy, environmentally friendly way of getting around Cambridge and the Boston area. Cambridge is well suited for bicycling and more people are using their bikes every day for commuting, shopping, and general transportation.

Enhancing and promoting sustainable transportation is a cornerstone of Cambridge climate protection policies.

Providing bicycle parking encourages people to use their bicycles as transportation. People are more likely to use a bike if they are confident that they will find convenient and secure parking at their destination.

Providing a designated area for bike parking gives a more orderly appearance to a building and prevents cyclists from locking their bikes to unacceptable fixtures, such as trees, benches, or railings. However, if a bike rack appears insecure, does not fit bikes well, or is in the wrong location, cyclists will not use it.



Getting it Right

When installing bicycle parking, it is important to consider the following:

- Location of building entrance(s) that the cyclists will be using
- Quantity of bikes (current or anticipated) parking at the site
- Amount of time that bikes will be parked there (a few hours versus all day)

Acceptable Bike Racks

There are multiple designs for bicycle racks produced by many manufacturers. Bike racks can be purchased as single units, with a capacity of 2 bikes (one on each side), or as multiple units, with a larger capacity. Only some designs have proven successful.



Features of a good bike rack include:

- Stable structure and permanent foundation that is securely anchored in the ground
- Support for an upright bicycle by its frame in **two (2)** places
- Design that prevents the bicycle from tipping over
- Ability to support a variety of bicycle sizes and frame shapes
- Space to secure the frame and one or both wheels to the rack
- Keeps bike wheels on the ground



Acceptable racks, like the "Post and Ring", "U" racks and "Swerve" racks have two-point support and fit a variety of bicycle types.

Unacceptable Bike Racks

Bicycle racks must **NOT**:

- Only support the bicycle at 1 point
- Allow the bicycle to fall, which can damage the bike and block pedestrian right-of-way
- Have sharp edges, that can be hazardous to the visually impaired
- Support the bicycle by one wheel
- Connect to each other with a bar across the top (that blocks certain handlebars and baskets)
- Suspend any part of the bike in the air

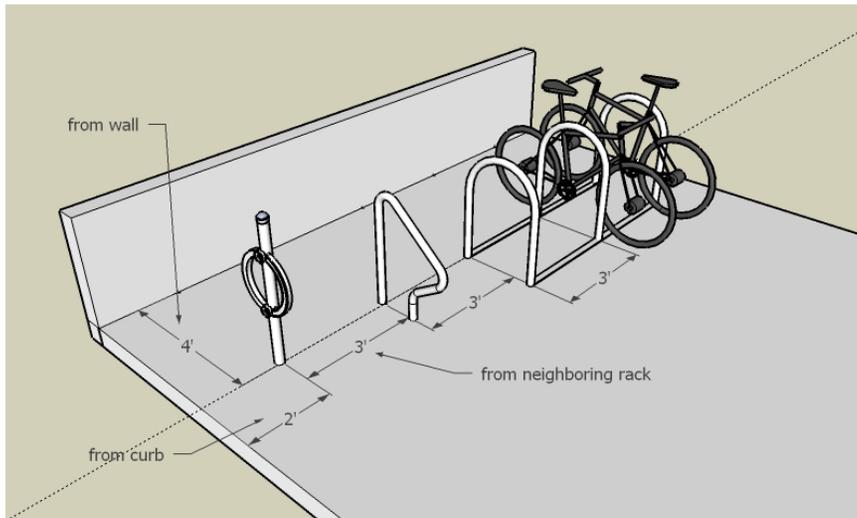
The rack should be easily and independently accessible and accommodating for a bicycle at least seven feet in length and two feet wide while still allowing access to each space when parking area is full. Rack units that are (installed) closer than 36 inches together prevent cyclists from utilizing the racks to their fullest capacity.

DO NOT USE racks that only provide one point of support or only accommodate certain bicycle shapes.

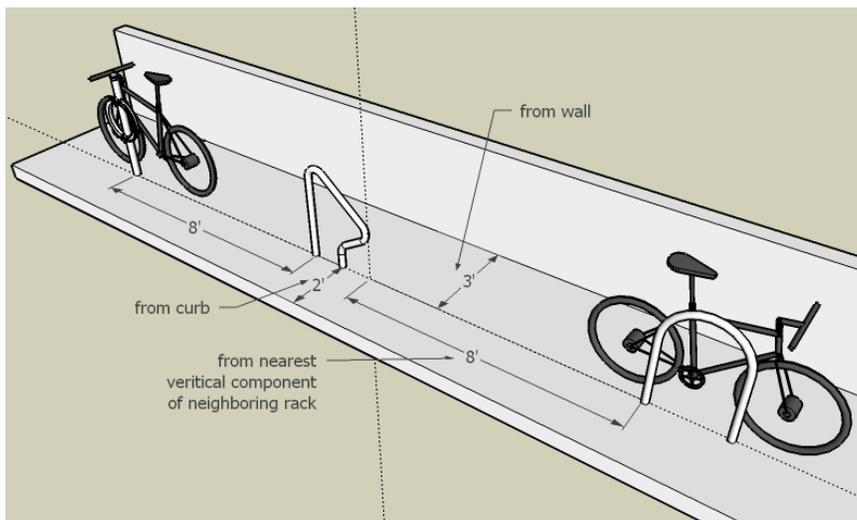


Dimensions

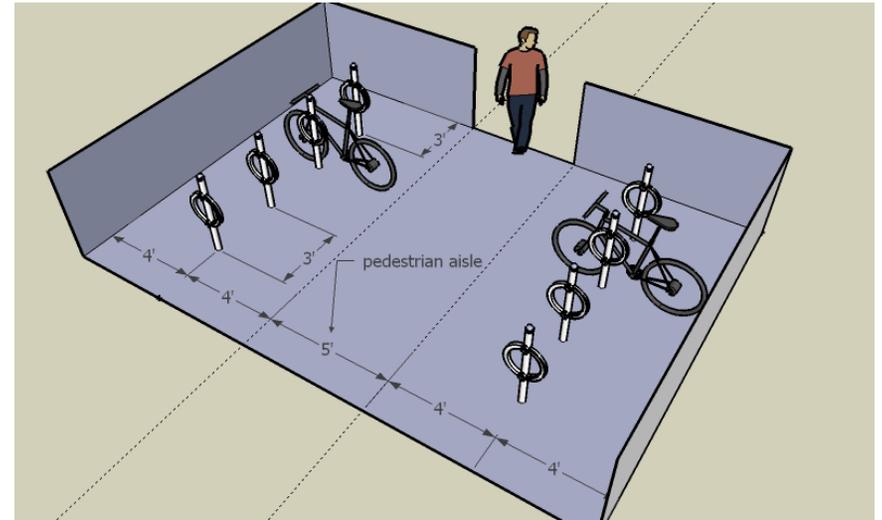
Distances between the bike rack and objects nearby vary depending on the context and the type of rack. Some racks have only one vertical component, such as the pole and ring rack, whereas others have two, such as the inverted-U rack. Measurements must be taken from the nearest vertical component of the rack to the object.



Racks aligned side by side



Racks aligned end to end



Enclosed rack area with pedestrian aisle

Distance to other Racks:

- Rack units aligned parallel to each other (side by side) must be at least 36 inches apart. This includes racks that are sold as multiple rack units attached together.
- Rack units aligned end to end must be at least 96 inches apart.

Distance from Wall:

- Rack units placed perpendicular to a wall must be at least 48 inches from the wall to the nearest vertical component of the rack.
- Rack units placed parallel to a wall must be at least 36 inches from the rack to the wall.

Distance from a Curb:

- Rack units placed perpendicular to the curb must be at least 48 inches from the curb to the nearest vertical component of the rack.
- Rack units placed parallel to the curb must be at least 24 inches from the curb to the rack.

Distance from a Pedestrian Aisle:

- Rack units perpendicular to a pedestrian aisle must be at least 48 inches from the rack to the edge of the aisle, and the aisle should be at least 60 inches wide.

Other Distances:

- Racks should be no more than 30 feet from the building entrance that they serve.
- Allow at least 4 feet for safe pedestrian clearance
- 14 feet from curbside fire hydrant
- 6 feet from a wall fire hydrant

Choosing a Location

Location is an extremely important factor in the utility of a bike rack. The rack should be located in a safe and accessible space (see Article 6.49.3 for requirements).

Safe locations are:

- In full view, maximizing visibility and minimizing vandalism, near pedestrian traffic, windows, and/or well-lit areas
- Under cover, to protect bikes from inclement weather
- Far enough away from the street or parking spaces so that bikes will not be damaged by automobiles, on a setback if possible
- Not obstructing pedestrian traffic



Accessible locations are:

- Between the road/path that cyclists use and the entrance of the building
- Not up stairs or large curbs, preferably near handicap accessible ramps
- Spacious enough to allow room for bikes of all shapes and sizes to use the racks to their fullest capacity.
- Close to the main entrance that cyclists use for the building

Private developers and property may not install racks in the public right of way without formal permission from the City.



Weather protected bicycle parking is desirable at locations where bikes may be parked for extended periods.

Short-Term Versus Long-Term Parking



Another factor in bike rack choice is the amount of time that each cyclist is expected to park at the rack. Bike parking for a commercial area, such as a restaurant or store, is considered short-term, as cyclists are expected to park there for a couple of hours (at the most). The main concerns for short-term bike parking are close proximity to the building entrance and visibility.



For long-term parking, such as at transit stations, workplaces, or residential areas, where cyclists may park all day or overnight, it is better for bikes to be parked in lockers, covered storage areas, parking garages or indoors. Safety is the main concern with long-term parking. Bikes need to be sheltered from inclement weather, under cover or in a locker. To prevent vandalism, racks should be within view of any parking attendant, security guard, or transit worker.

Weather protected bicycle parking is appealing to cyclists and is twice as likely to be used as unprotected parking options. Bicycle parking lockers housed inside parking garages is a desirable choice for cyclists. Using building design to add sheltered storage is a creative means to supplying much needed parking options for cyclists.



Parking Garages



As stated in the Zoning Ordinance Article 6.49.2, “When automobile parking spaces are provided in a structure, all required bicycle spaces shall be located inside that structure or shall be located in other areas protected from the weather.” Bicycle parking in parking garages must be either on the same level as the

entrance to the garage or accessible via automobile ramps designed to serve bicyclists, or near an elevator that is sufficiently large to accommodate bicycles. Bike racks inside parking garages must still meet the security standards of short-term racks or lockers.

Locking

The rack must allow for the convenient securing of the bicycle frame and both wheels using a chain, cable or U- lock. Chains and cables vary in length from 2’ to 6’. U-locks, which cyclists frequently use to attach their frame and one wheel to a rack, are usually between 3.25” and 5” wide and vary in length from 5.5” to 12”.



Chain Lock



U-Lock

The locking surface on the rack must be thin enough for cyclists to use these popular locking mechanisms, yet thick enough not to be cut by hand tools, such as bolt cutters, pipe cutters, pry bars and wrenches.

Bike Rack Manufacturers

There are many bicycle rack manufacturers who can supply high quality racks that meet Cambridge specifications. The City of Cambridge maintains a list of bicycle rack



manufacturers on its website: http://www.cambridgema.gov/cdd/et/bike/bike_park.html

Custom designs and “artistic” racks can also be used, provided they meet the performance criteria for bicycle racks. Images on this page show examples of such racks.

Cambridge staff are always available to assist with reviewing the performance standards for bicycle racks, including custom designs, as well as rack selection and placement; please feel free to contact us at bikerack@cambridgema.gov.



Photo Credits:

With appreciation to the following individuals and companies for use of their photographs:

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