City of Cambridge

Bicycle Parking Guide

WHY IS BICYCLE PARKING IMPORTANT?

The City of Cambridge promotes bicycling as a healthy, environmentally friendly way of getting around. 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's policies.

photo by Jessica Zdeb

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

Providing a designated area for bicycle 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 bicycle rack appears insecure, does not fit bicycles well, or is in the wrong location, cyclists will not use it. Ensure that your bicycle racks are approved and well used by following these guidelines.

DEVELOPMENT REQUIREMENTS AND ZONING ORDINANCE

Locations and types of bicycle parking must be shown in building site plans at a 1:10 scale and be approved by the Traffic, Parking, and Transportation Department and the Community Development Department. Zoning requirements are found in Article 6.100 of the Zoning Ordinance. This brochure provides an overview of the requirements with some details and graphics for clarification, but it should not be construed as the full set of legal requirements. Please refer to the full text of the zoning ordinance here:

www.cambridgema.gov/CDD/zoninganddevelopment/

WHAT IS A BICYCLE PARKING SPACE?

A bike parking space is an area within which one intact bicycle may be easily and conveniently accessed and securely stored and removed in an upright position with both wheels resting on a stable surface, without requiring the movement of other parked bicycles, vehicles, or their objects to access the space.

HOW MUCH BICYCLE PARKING IS REQUIRED BY ZONING?

The tables below summarize the zoning requirements for some typical land uses. For more detail, review Section 6.100 of the Zoning Ordinance. When calculating the required number of long-term or short-term bicycle parking spaces for a particular use, round up to the nearest whole number.

	Minimum Required Bicycle Parking (see pg. 7 for more details)	
Residential Use Type	**Long-Term**	**Short-Term**
Single-family dwellings Two-family dwellings Rectories, parsonages	No minimum	No minimum
Townhouse dwellings Multifamily dwellings	1.00 space per unit for the first 20 units in a building; 1.05 spaces per unit for additional units	0.10 space per unit on a lot (for lots with 4 or more units)
Elderly oriented congregate housing	0.50 space per unit	0.05 space per unit
Lodging houses, convents, monasteries, dormitories, fraternities, sororities	0.50 space per bed	0.05 space per bed
Hotels, motels Tourist houses	0.02 space per sleeping room	0.05 space per sleeping room

Note:

Where four or fewer long-term bicycle parking spaces are required, they may be provided in a covered outdoor location rather than an enclosed structure.

photo by Greg Raisman

HOW MUCH BICYCLE PARKING IS REQUIRED BY ZONING?

	Required Bicycle Parking (minimum spaces per 1,000 sq. ft. of floor area)	
Non-Residential Use Type	**Long-Term**	**Short-Term**
General or professional offices Arts/crafts studios	0.30	0.06
Technical offices, research labs	0.22	0.06
Banks, financial offices (ground floor)	0.30	0.50
Retail stores, consumer service	0.10	0.60
Food and convenience stores Entertainment, recreation	0.10	1.00
Restaurants, bars	0.20	1.00
Theaters, gathering halls	0.08	1.00
Industrial (manufacturing, storage) Auto repair, auto sales	0.08	0.06
Churches	0.08	0.50
Medical offices	0.30	0.50
Medical clinics	0.20	0.50
Hospitals	0.20	0.10
College or university academic or administrative facilities	0.20	0.40
College or university student activity facilities	0.20	1.00
Primary, secondary or other schools Other uses	*see zoning*	

Note:

Up to four required long-term bicycle parking spaces (or up to 20% of the required number, whichever is greater) may be provided as short-term bicycle parking spaces.

WHEN ARE YOUR REQUIRED TO PROVIDE BICYCLE PARKING?

Constructing a new building:

Unless the building is a single-family or two-family detached dwelling, bicycle parking is required. Bicycle parking is still allowed and encouraged for single-family and two-family homes.

Expanding an existing building or converting it to a new use:

The zoning provides a set of rules to determine when bicycle parking is required. Here is a simplified way to figure out if the requirements will apply; for more detail, review Section 6.100 of the Zoning Ordinance.

1. Calculate the sum of total long-term and short-term bicycle parking spaces required (under current zoning) for the

   EXISTING or PRIOR USE on the site: _____

2. Calculate the sum of long-term and short-term bicycle parking spaces required (under current zoning) for the

   NEW or PROPOSED USE on the site: _____

3. If the number in Calculation 2 is greater than the number in Calculation 1 by at least 15% and at least two (2) spaces, then short-term and long-term bicycle parking is required for the *entire building* (not just for the increase).

PUBLIC CONTRIBUTION FOR SHORT-TERM BICYCLE PARKING

Private developers and property owners may not install racks in the public right-of-way without formal permission from the city. If you have a lot on which short-term parking cannot be provided due to site constraints (e.g. an existing building with zero lot lines is being reused), you must get approval from the city to make a contribution towards parking on public property in lieu of on-site bicycle parking. For more information please e-mail bikerack@cambridgema.gov.

SITING BICYCLE PARKING

Bicycle parking must be designed for convenient daily use, not simply for storage of bicycles. Location is an extremely important factor in the usefulness of a bicycle rack. The rack must be located in a safe and accessible place with adequate space to maneuver a bicycle in and out.

Safe locations are:

photo by John Luton

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

Accessible locations have these characteristics:

- They are between the road/path that cyclists use and the entrance of the building.
- The primary access route is at least 5 feet wide.
- The primary access route does not have a slope greater than 5% (8% if level landing is provided every 30 feet of linear distance).
- Access may be provided by an elevator with interior dimensions of 80" x 54".
- Close to the main entrance that cyclists use for the building. For short-term parking within 25' is ideal but no more than 50' is required.

Weather-protected bicycle parking is desirable where bikes are parked for long periods.

SHORT-TERM AND LONG-TERM PARKING

Some aspects of bicycle parking are different depending on whether it will serve people who are storing bicycles all day long or overnight, or people who are making short trips to and from the site.

Long-Term:

Long-term Bicycle Parking must be located in an enclosed, limited-access area designed to protect bicycles from precipitation and from theft. It may be provided in the following types of facilities:

- Enclosed spaces in a building, such as bicycle rooms or garages.
- Bicycle sheds, covered bicycle cages, or other fully covered and enclosed structures within 200 feet of the main building entrance.
- Bicycle lockers, or fixed-in-place containers wherein single bicycles may be securely stored and protected.
- Weather-protected bicycle parking spaces that are monitored at all times by an attendant or other security system.

photo by Mark Horowitz

Short-Term:

Short-term bicycle parking must be located in a publicly accessible space within 50 feet of pedestrian entrances. Short-term bicycle parking is intended primarily to serve visitors, such as retail patrons making trips of up to a few hours; however, it may serve other bicycle users as needed.

PARKING GARAGES

Bicycle parking in parking garages must be either on the same level as the entrance to the garage from the street or accessible via automobile ramps designed to serve bicyclists (with slope of less than 5% or less than 8% with a landing every 30 feet), or near an elevator that is sufficiently large to accommodate bicycles. Bicycle racks inside parking garages must still meet the security standards of short-term racks or lockers. Where long-term bicycle parking is next to automobile parking or loading, a physical barrier, such as bollards, must be provided.

photo by Norman Cox

ACCEPTABLE BICYCLE RACKS

There are a variety of designs for bicycle racks produced by many manufacturers. Bike racks can be purchased as single units, with a capacity of locking 2 bikes (one on each side), or as multiple units attached together, with a larger capacity. However, not all manufactured bicycle racks meet Cambridge's standards.

Features of an acceptable bicycle rack:

- Installed on a permanent foundation (e.g., concrete pad) to ensure stability.
- Securely anchored into or on the foundation with tamper-proof nuts if surface mounted.
- Support for an upright bicycle by its frame horizontally in **two (2)** or more places.
- Keeps both bike wheels on the ground.
- 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 with a cable, chain, or u-lock.
- Diameter of locking pole is no more than 1.5 inches.
- Galvanized or stainless steel racks are recommended (and required for racks on public property) because they hold up best.

photo by Greg Raisman

Acceptable racks, like the "Inverted U," "Swerve," and "Post and Ring" racks, have two-point support and fit a variety of bicycle types. Custom designs and "artistic" racks can also be used, provided they meet the performance criteria for bicycle racks.

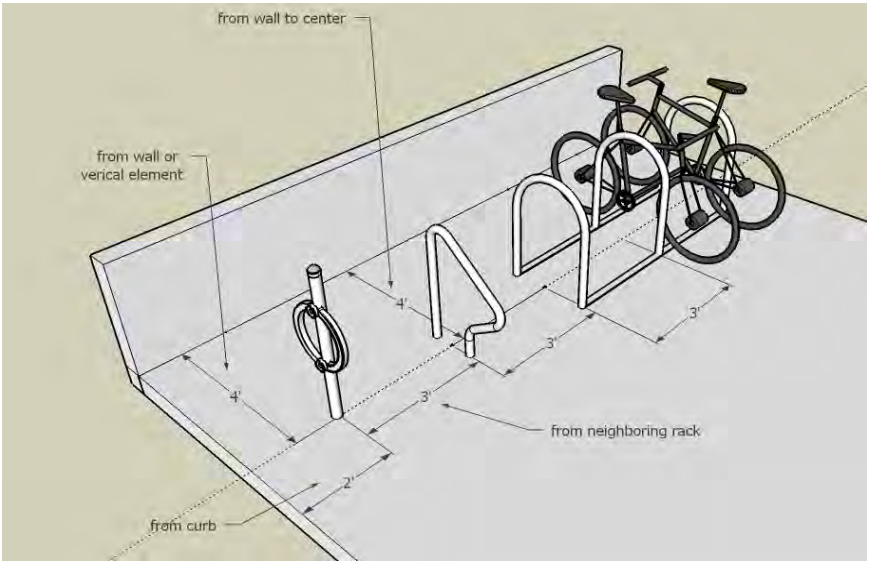
UNACCEPTABLE BICYCLE RACKS

Bicycle racks must *NOT*:

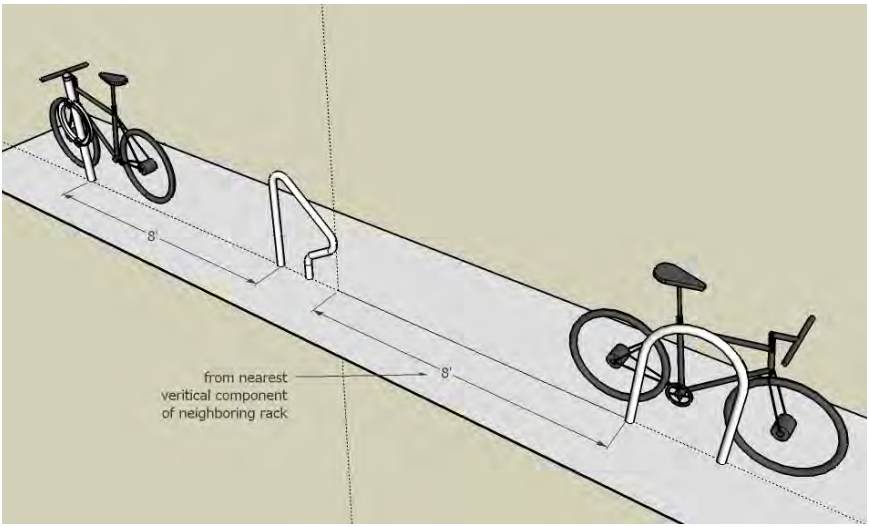
- Support the bicycle at only one point.
- Allow the bicycle to fall, which can damage the bike and block pedestrian right-of-way.
- Have sharp edges, that can be hazardous to the visually impaired.
- Support the bicycle by one wheel.
- Connect to each other with a bar on top (that can block handlebars and baskets.
- Suspend any part of the bike in the air or require that the bicycle be lifted to get it into position.

LAYOUT DIMENSIONS

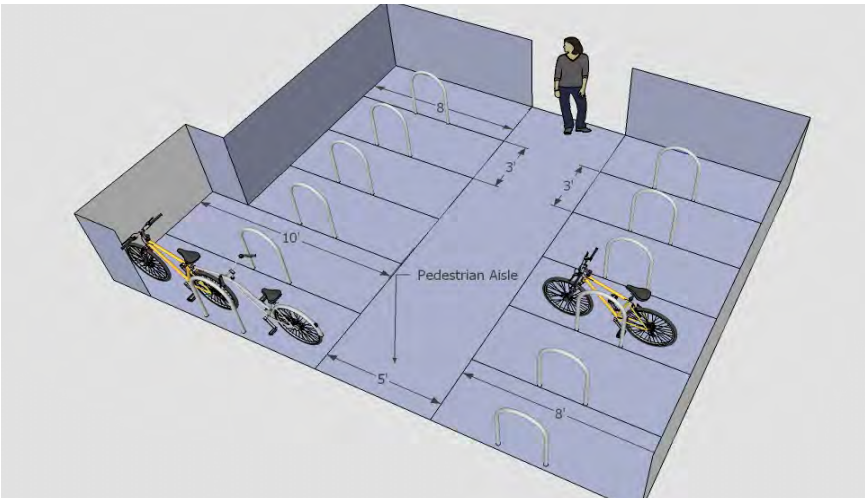
Proper layout of bicycle racks is essential to ensure that they will safely and conveniently accommodate the intended number of bicycles. Layout must follow these minimum dimensions:



Racks aligned side by side



Racks aligned end to end



Enclosed rack area with 20 or more racks, with pedestrian aisle and at least 5% of spaces providing an additional 2 feet of space for tandems and trailers.

Distance to other Racks:

- Rack units aligned parallel to each other (side by side) must be at least 3 feet apart. This includes racks that are sold as multiple rack units attached together.
- Rack units aligned end to end must be at least 8 feet apart.

Distance from Wall:

- Rack units placed perpendicular to a wall must be at least 4 feet from the wall to the center of the rack.
- Rack units parallel to a wall must be at least 3 feet from the rack to the wall.

Distance from a Curb:

- Rack units placed perpendicular to the curb must be at least 4 feet from the curb to the center of the rack.
- Rack units placed parallel to the curb must be at least 2 feet from the curb to the rack.

Distance from a Pedestrian Aisle:

- Rack units perpendicular to a pedestrian aisle must be at least 4 feet from the center of the rack to the edge of the aisle, and have at least a 5 feet wide aisle.
- Where 20 or more bicycle parking spaces are required, at least 5% of the spaces must be 10 feet long instead of 8 feet to allow space for tandems and trailers.

Other Distances:

- Racks should be at least 14 feet from curbside fire hydrants and 6 feet from wall fire hydrants.

City of Cambridge

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