

# Bicycle Parking Guidelines

## Purpose

In 2011 the City of Ellisville adopted the Bikeable Walkable Community Plan as part of our Comprehensive Plan. The City of Ellisville’s vision for the future is that it will be a community in which residents, employees and visitors of all ages and abilities can safely, comfortably and conveniently travel to destinations in and around the City by bike and foot. These Guidelines are for the purpose of installation, location and design of bike racks within the City of Ellisville.

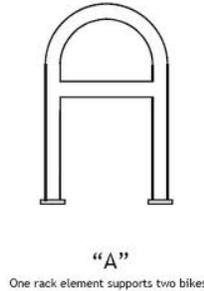
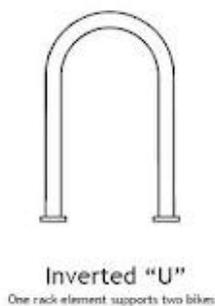
## Bicycle Parking Requirement

Upon construction or change in ownership, all commercial, industrial, institutional and multi-family residential uses shall provide commercial duty bicycle rack(s) in accordance with the following, unless otherwise approved by the City:

Schools	10% of the number of students, plus 3% of the number of employees.
Commercial, Office, Institutional Uses	10% of the number of parking spaces
Industrial Uses	4% of the number of parking spaces
Multi-Family Residential Uses	1 space per 4 units

## Design Standards

The "inverted U" type bicycle rack is the required bicycle parking rack and shall be fabricated and installed in accordance with these guidelines. Also acceptable is the “A” rack which is an inverted U rack with a horizontal element as depicted below.



1. The rack should support the bicycle upright by its frame in two places which will help prevent damage to the bicycle.
2. Also, having the bicycles set up in a more organized fashion gives the parking area much more needed space. The inverted U and A racks will prevent the wheel of the bicycle from tipping over by supporting both a wheel and the frame.
3. U-lock compatible: Most bicyclists use u-style bike locks. Some bike racks are not compatible with u-locks so you get bikes either parked incorrectly to the rack using up much more space than they should, or they will only be locking the front tire of their bike to the rack, making it an easy target for bike thieves.
4. The rack should allow the bicyclist to lock both the frame of the bike and at least one wheel to the rack.
5. Use of powder-coated steel is the preferred material.

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The rack must be made of sturdy, high quality materials and designed so that it cannot be disassembled. Additionally, incorporating artistic elements into the design is encouraged (see possible artistic features and elements below).



## Installation Options

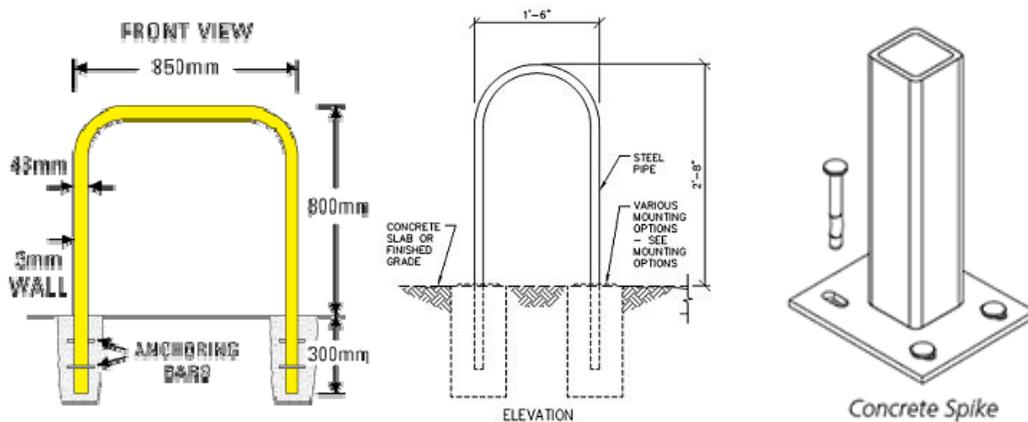
There are three basic types of installations: In ground mount, surface mount and freestanding/rail mounted. Only in-ground and surface are allowed for required bike racks. If additional bike racks, above the minimum required are desired, then the free-standing option may be an option, subject to staff approval.

1. In Ground Mount: This option is usually where the rack is actually poured into the concrete bed. It has a nice clean, permanent look, but, the downside is that its permanent. One will often see this option when there is new construction. This option is also often used where there is no concrete surface to mount, like on asphalt or in grass. Usually a footing is dug and then concrete is poured and the rack placed into the footing.
1. Surface Mount: This is the most common type of installation and is usually done where there is an existing concrete pad. It is usually quite inexpensive and easy to do. The rack has a flange plate with mounting holes. Place the rack in the desired location, mark the holes, drill out the holes and then attach the rack with mechanical anchors of your choice.

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This option does not work on asphalt or pavers. A tamper proof fastener should be used so it can be removed only by installers who have an access tool. This option is good for locations where the racks may have to be removed in the future

- Free-standing/Rail Mounted: This is where the rack is left free-standing and is kept in place by its own weight. This option is reserved for racks above the minimum required and subject to staff approval.



### Rack Layout

- Allow front in, or back in parking. Being able to park a bicycle in either a side to side, or back to front position will help in the flexibility of parking.
- Each rack element which securely holds the bicycle in position should be separated by at least 30 inches. This amount of room between rack elements will allow the rider to park their bike while not to disrupt the parked bicycles on either side.
- Allow enough space for snow removal, sweeping equipment and handicapped access. A minimum of 5' of clearance between the building and the bike handlebar is a good guide. If you locate your bike rack at least 6' from the nearest obstruction on a building, you should be OK.
- Consider car access. A bike rack too close to the street or a driving lane will interfere with travelling vehicular traffic. Generally a 2'-3' setback from the street should be adequate.

### Rack Location

- The rack should be positioned in a well-lit, secure area such as a city street, or well-traveled side street. Having a secure parking space is one of biggest concerns a bicyclist would have. The idea is to have bicycles parked in a place that the rider will feel safe that the bicycle will not be disturbed or stolen, while also giving the sense of security that the rider will not be disturbed.
- To encourage and facilitate the use of bike racks, they should be placed near main entrances. Place racks no further from the main entrance to a business than the closest car parking space.
- Place the bike rack in a place that is visible so it makes it difficult for thieves to steal the bike.
- Choose a location where there is cover from the elements, preferably.

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5. Consider locations near bus stops and loading zones as long as the rack does not interfere with boarding or loading patterns.
6. Bike parking should be sited in front of the building in a visible place whenever possible. If that location is not available, the business must provide signage at the front entrance directing cyclists to the bike parking.