GG147-14 407.3.1, 407.3.2

Proponent: Ed Fendley, U.S. Environmental Protection Agency, representing USEPA

Revise as follows:

407.3.1 Short-term bicycle parking. Short-term bicycle parking shall comply with all of the following:

- It shall be provided with illumination of not less than 1 footcandle (11 lux) at the parking surface:
- It shall be located at the same grade as the sidewalk or at a location reachable by ramp or accessible route;
- 3. It shall have an area of not less than 18 inches (457 mm) by 60 inches (1524 mm) for each bicycle;
- 4. It shall be provided with a rack or other facility for locking or securing each bicycle; and
- 5. It shall be located within 100 feet (30 480 mm) of, and visible from, the main entrance.

Exception: Where directional signage is provided at the main building entrances, short-term bicycle parking shall be permitted to be provided at locations not visible from the main entrance.

6. Each rack shall provide not less than two points of contact between the bicycle frame and the rack and allow that the frame and not less than one wheel of the bicycle be locked to the rack with a U-shaped shackle lock.

407.3.2 Long-term bicycle parking.

Long-term bicycle parking shall comply with all of the following:

- 1. It shall be located on the same site and within the building or within 300 feet (91 440 mm) of the main entrances;
- 2. It shall be provided with illumination of not less than 1 footcandle (11 lux) at the parking surface:
- 3. It shall have an area of not less than 18 inches (457 mm) by 60 inches (1524 mm) for each bicycle; and
- 4. It shall be provided with a rack or other facility for locking or securing each bicycle.
- 5. Each rack shall provide not less than two points of contact between the bicycle frame and the rack and allow that the frame and not less than one wheel of the bicycle be locked to the rack with a U- shaped shackle lock.

Not less than 50 percent of long-term bicycle parking shall be within a building or provided with a permanent cover including, but not limited to, roof overhangs, awnings, or bicycle storage lockers.

Vehicle parking spaces, other than those required by Section 407.4, local zoning requirements and accessible parking required by the *International Building Code*, shall be permitted to be used for the installation of long term bicycle parking spaces.

Reason: This proposal addresses two criteria essential to effective bicycle racks: bicycle security and bicycle stability. For bicycles to be used as a means of transportation, bicyclists need to be confident that they have a place to store or park their bikes that is reasonably safe from theft. The recent rise in bicycle theft makes the need for such security of particular importance. Cable locks and chains are easily cut; u-shaped shackle locks provide a much more reliable means of securing a bicycle. Thus, racks should accommodate u-shaped locks and allow for the use of such locks to secure frame of the bicycle and at least one wheel to the rack.

Bicycle stability is important as it makes the rack more usable for the bike rider and reduces the chances that a bicyclist will use more space than necessary. More specifically, a bike rack should provide two points of contact between the rack and the frame of the bicycle. This provides support for the bicycle as the rider locks and unlocks the bicycle and helps keep a bicycle in place if another rider touches the bicycle when locking up or removing another bicycle. Absent this support, many riders place their bicycles parallel to the set of racks, thus using many spaces that had been intended for other riders and effectively reducing the number of available bicycle spaces.

Bibliography:

Association of Pedestrian and Bicycle Professionals' *Bicycle Parking Guidelines*, 2nd Edition, 2010, www.apbp.org.

Cost Impact: Will increase the cost of construction. The code change proposal may increase the cost of construction.

GG147-14: 407.3.1#3-GITLIN189