| | Sportworks | | | | Urban Racks | | Dero | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Criteria** *(0-5, 5=best)* | **Tofino** | **Plaza** | **Staple/Sheffield** | **Vertical+** | **Urban Rack** | **Rack #2** | **Bike Bike Rack** | **Bike Hitch** | **Cora Coathanger** | |
| **Lockability** | | | | | | | | | | |
| **Security** | | | | | | | | | | |
| **Stability/Support** | | | | | | | | | | |
| **Wheel Protection** | | | | | | | | | | |
| **Space Efficiency** | | | | | | | | | | |
| **Accessibility** | | | | | | | | | | |
| **Inclusivity** | | | | | | | | | | |
| **Visibility** | | | | | | | | | | |
| **Attractiveness** | | | | | | | | | | |
| **Cost*** | $180-$375 | $70-$100/bike | $100-$180 | $90-$150/bike | | | $450 | $100 | | |

## Lockability

- The bike rack should allow the frame and both wheels to be locked with conventional high-security locks, such as an U-locks. Should allow for both forward and back-in orientations.

**Security**

- Since round stock may be vulnerable to pipe cutters, whenever possible, racks should be constructed from square metal stock or designed to prevent a full swing of a pipe cutter with bicycles properly secured.
- Bike racks should be bolted to the ground using bolts that cannot be unscrewed.

**Stability/Support**

- Generally, the bike rack should support the bicycle at two contact points, preferably one point near the front wheel and the bicycle's down-bar (where a U-lock can be locked), and one point at the back of the bicycle's frame near the seat post. This helps prevent the bicycle from falling over and provides two distinct places to lock a bicycle's front and back wheels.
- Bike racks should be a minimum of three feet tall to allow bicycles to lean against them without putting pressure on the wheels, and to enable a lock to pass through the frame and at least one wheel. This height also has the benefit of reducing tripping hazards.

**Wheel Protection**

- The bicycle rack must not bind or trap the wheels of the bicycle independent of the frame, or the wheels will bend if the bicycle gets knocked over. When the bicycle is supported in two places, this is less likely to happen.

**Inclusivity**

- Correctly accommodates the variety of bikes used by people of all ages and abilities, including bicycles with fenders, rear panniers, and front racks/platforms; longbikes and xtracycles; tagalongs & trailers; Metrofiet, Bullitt, and Madsen cargo bicycles; folding bicycles; and kids bicycles.

**Space Efficiency**

- Space efficient bike racks, both when bikes are and aren't present, helps ensure sidewalks and roadways can be dedicated to other purposes, such as pedestrian traffic.

**Accessibility**

- On racks designed for more than two bicycles, the bicyclists should not be forced to cram into one-another to be parked. The bicycles need to be protected from potential damage. In addition, bicyclists should be able to easily access their bicycle (and its panniers), without knocking into other bicycles parked on the rack.
- The bike rack should not require the user to lift their bicycle.

**Visibility**

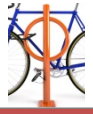
- A highly visible rack lets bicyclists know where they can park their bikes and provides a greater level of public awareness that bicycling is considered socially acceptable/desired.

**Attractiveness**

- Because bike racks are one of the most ubiquitous pieces of street furniture, a uniform, visually appealing rack has a substantial impact on a city's aesthetic.

**Cost**

- ** The above listed cost may not accurately represent actual cost if a city/agency purchases the racks in large quantities.*
- The City of Portland has reduced its bike rack costs by establishing specifications for their bike racks and opening up a bid competition to rack companies and pipe benders alike. PBOT's estimated cost is $80/rack.
-

| | |
|---|---|
| **Sportworks** | |
| **Tofino**  | |
| **Plaza**  | |
| **Staple/Sheffield**  | |
| **Vertical+**  | |
| **Urban Racks** | |
| **Urban Rack** *(inverted U)*  | |
| **Rack #2** | |
| **Dero** | |
| **Bike Bike Rack**  | |
| **Bike Hitch**  | |
| **Other** | |
| **Cora Coathanger Rack**  | |
| | |