

# LONG-TERM BIKE PARKING





### LEAGUE OF AMERICAN BICYCLISTS

**BIKELEAGUE.ORG** 



**SINCE 1880...** 













#### BICYCLE FRIENDLY COMMUNITY



#### BICYCLE FRIENDLY BUSINESS



### **APPLY FOR RECOGNITION & FEEDBACK**





By JAMES BAUMGARTNER + AUG 26, 2015

More Businesses Across US Designated Bike-Friendly





AIPTA encourages bicycling as an easy option for transportation and provides amenites such as bike racks at innection centers, at bus stops, and on every single bus, and incentives such as allowing bikes to ride for free



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» Supports local, state, and national bike advocacy

» Offers classes on bicycle safety and maintenance

A Bicycle Friendly Business:

» Is easily accessible by bike

» Is a champion for bicycling in their community

» Offers convenient, secure bike parking

#### **Growth in U.S. Bicycle Commuting**

Percentage of residents commuting by bike, 1990-2014



### BICYCLE FRIENDLY COMMUNITIES (BFC)

70 LARGEST U.S. CITIES

#### U.S. AVERAGE Non-BFCs

Data: American Community Survey | BFC & non-BFC averages based on subset of 70 largest cities





ACCESS TO PLACES FOR PHYSICAL ACTIVITY



PROGRAMS

COMMUNITY-WIDE CAMPAIGNS



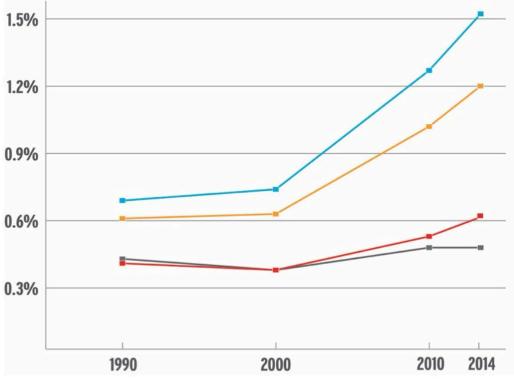
INDIVIDUAL SUPPORTS



Point-of-decision signage

- Complete Streets policies
- Zoning policies
- Comprehensive or Master plans
- Safe Routes
- Shared-use agreements
- Workplace facilities and policies
- Parks and recreation centers
- · Comprehensive physical education
- Opportunities to be active before, during, or after school
- Events combined with multi-channel messaging
- Walking or other activity groups
- Groups that support people with disabilities or chronic conditions
- Peer or professional support
- Technology

**EQUITABLE AND INCLUSIVE ACCESS** 



#### **BFA APPLICATION CRITERIA**



#### The Five E's:

- » Engineering
- » Encouragement
- » Education
- » Evaluation & Planning
- » Equity, Diversity, & Inclusion





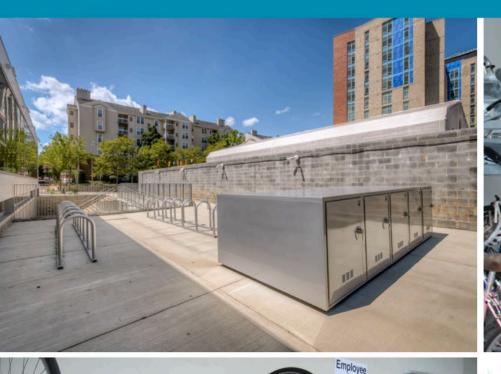
### **SECURE BIKE PARKING**





APBP Bike Parking Guidelines:

https://www.apbp.org/bicycle-parking-solutions





THE LEAGUE OF AMERICAN SESSION





### **Equality**









**Equity** 









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### **END-OF-TRIP FACILITIES**







### **EDUCATION & ENCOURAGEMENT**



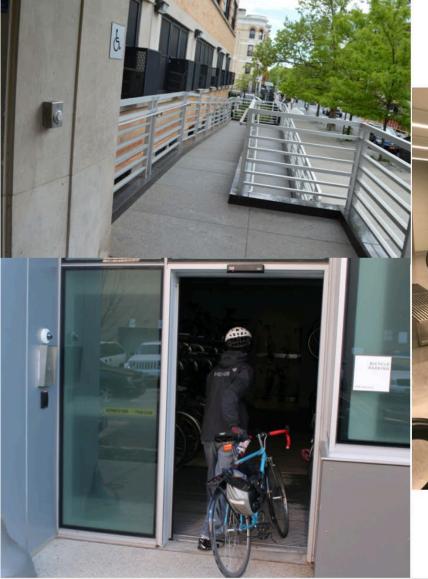






### **ACCESSIBILITY**



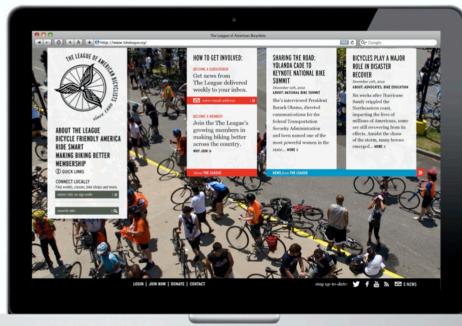




#### LEARN MORE...

- » About the League and other programs:
  - » bikeleague.org
- » About the BFC Program:
  - » bikeleague.org/community
- » About the BFB Program:
  - » bikeleague.org/business
- » About the BFU Program:
  - » bikeleague.org/university
- » Apply today:
  - » apply.bikeleague.org





#### **Upcoming Application Deadlines:**

»BFU: October 1

»BFB: October 5

### Overview

- What makes a good bike rack?
- Key elements of excellent long-term bike parking facilities
- Common pitfalls
- Proper layouts for bike rooms

### **Short-Term**

(Less than two hours)



### **Long-Term**

(More than two hours)



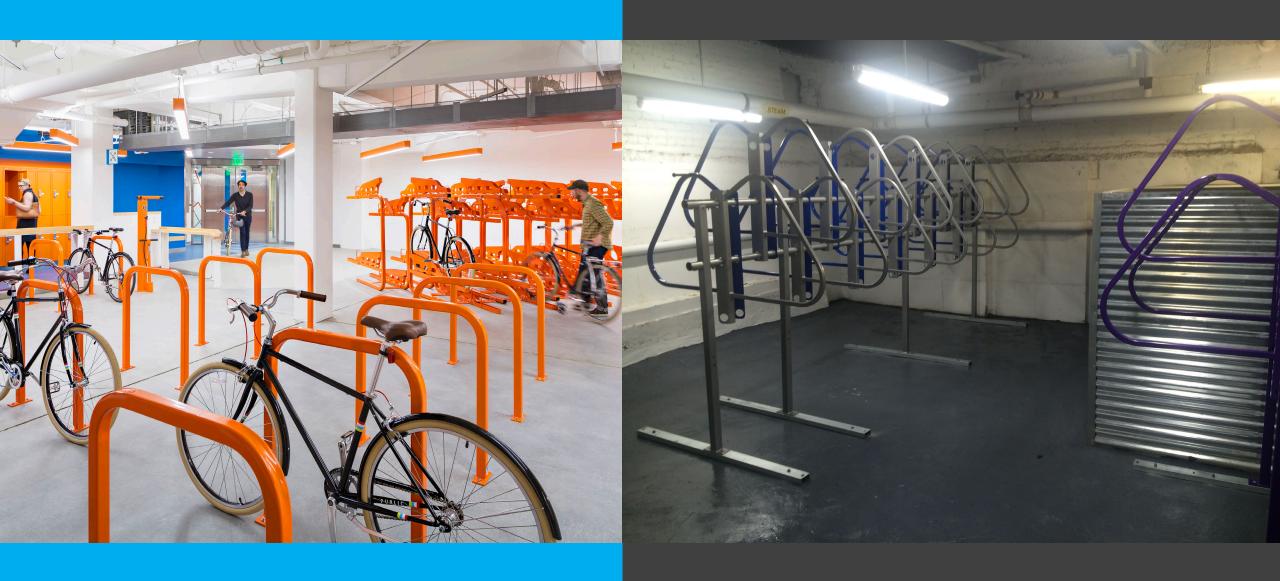
# What makes a good bike rack?



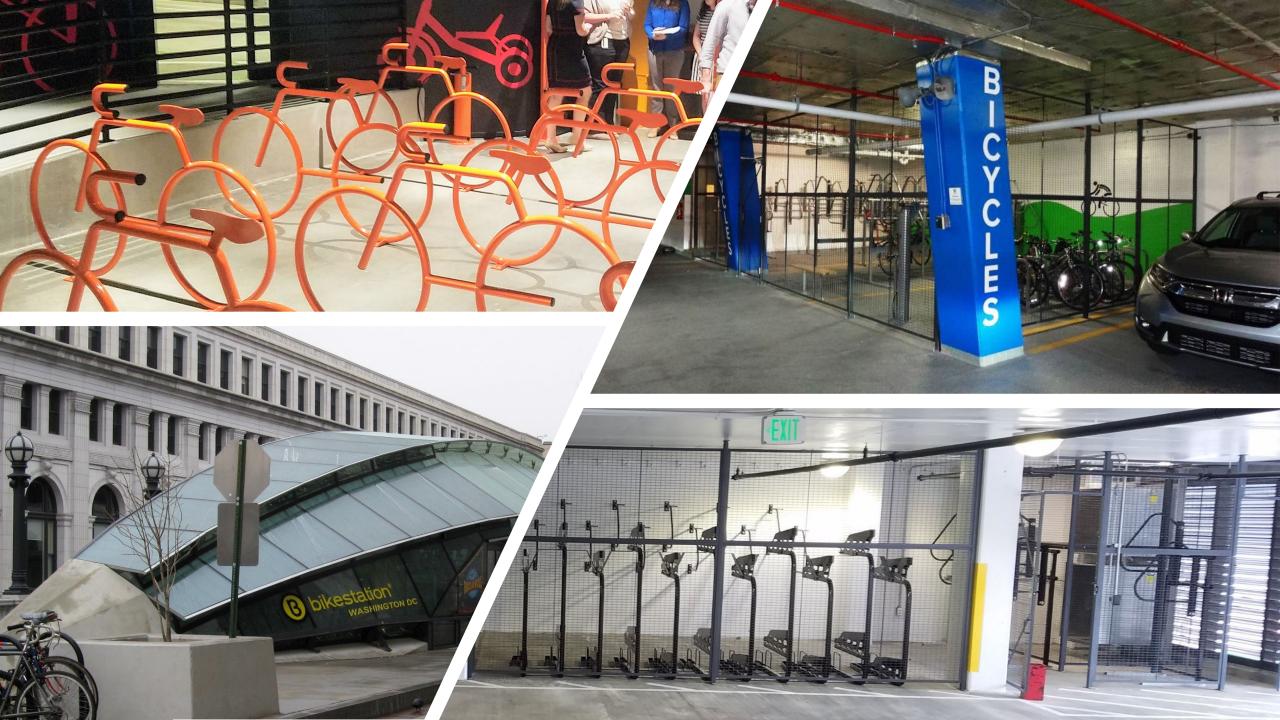
- Stability of the rack
- Two points of contact with the bicycle
- Security and Ease of Use

### **Amenity**

### **Afterthought**







# **Bike Rack Types**



#### **HORIZONTAL**

"Traditional-use" bike parking that is easily-accessible with a bike's two wheels on the ground. These racks are highly versatile.



#### **VERTICAL**

"Max capacity" bike parking saves space on the ground by pivoting the bike onto its rear wheel and lifting to the hook.



#### **TWO-TIER**

"Premium" bike parking that offers the space-efficiency of vertical racks and the broader accessibility of horizontal racks. **Horizontal Parking** 





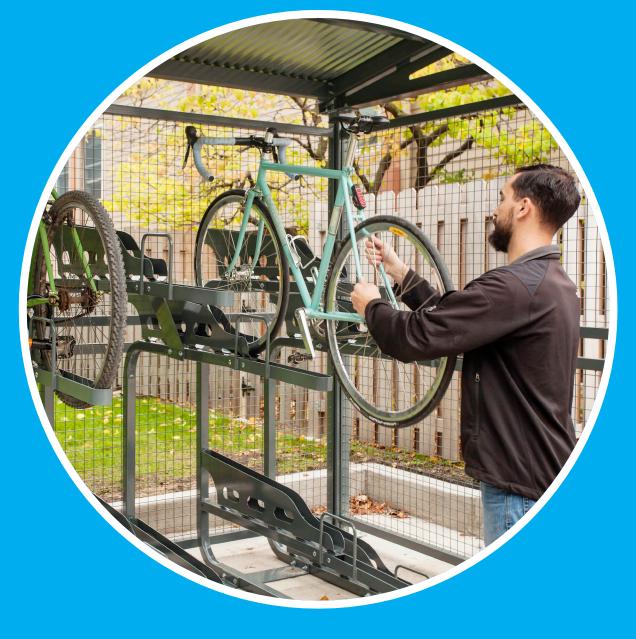






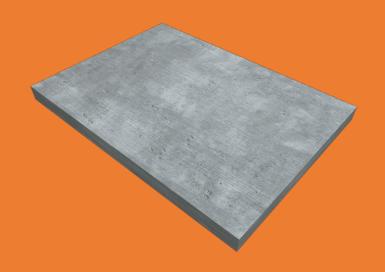
# **Two-Tier Parking**







### **Installation Surfaces**





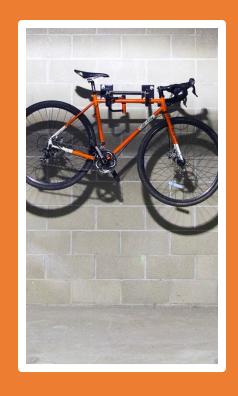


Dirt/Mulch/Grass



Tile/Asphalt/Pavers

### **Wall Material**



Concrete Block (SLEEVE anchors)



Poured Concrete (WEDGE anchors)



Wood Stud (LAG SHIELD anchors)

# **Auxiliary Items**



Pump and Tools



Storage



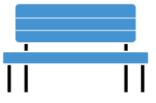
Signage



Maps and Messages



Pump and Tools



Seating



E-Bike Charging



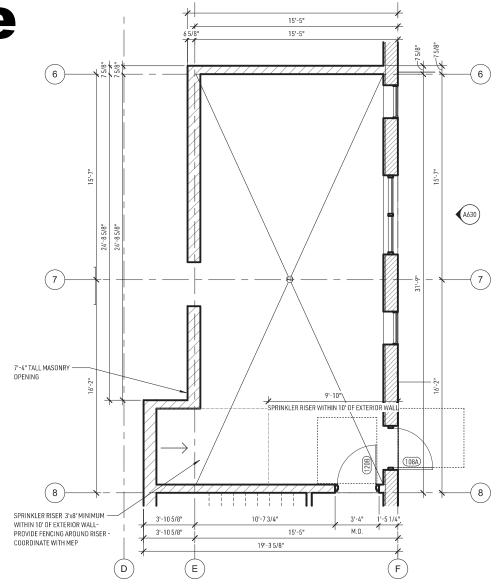
**Wash Stations** 



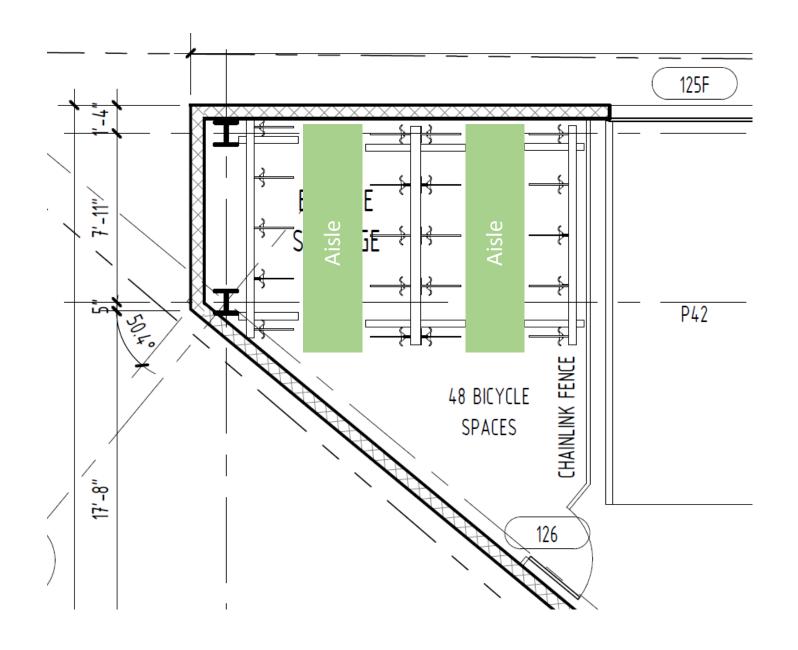


# **Know Your Space**

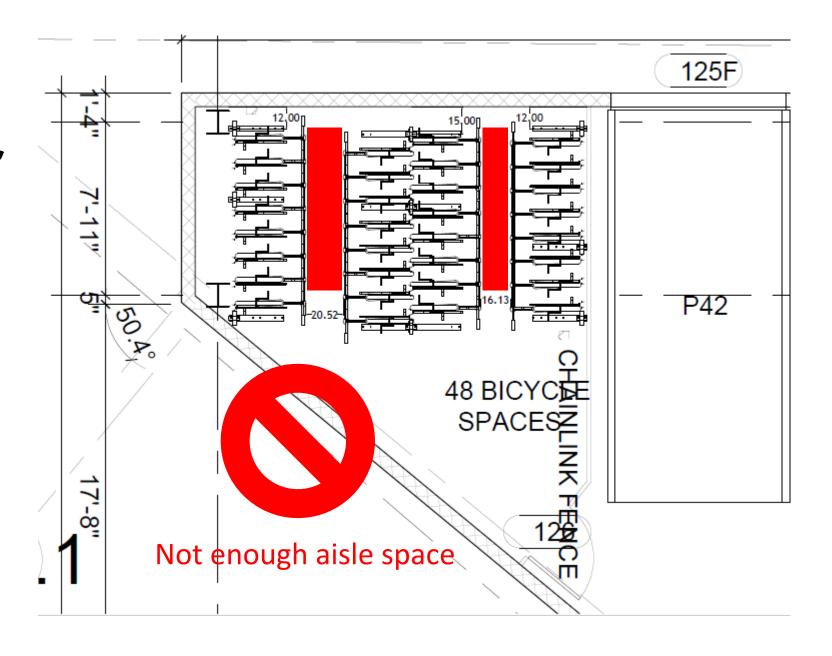
- 1. How many bikes parked?
- 2. Where's the location of the facility versus the desired destination of people using it?
- 3. What's the budget?
- 4. Security measures
- 5. Space description
  - Obstructions
  - Doorways
  - Room measurements
  - · Ceiling height



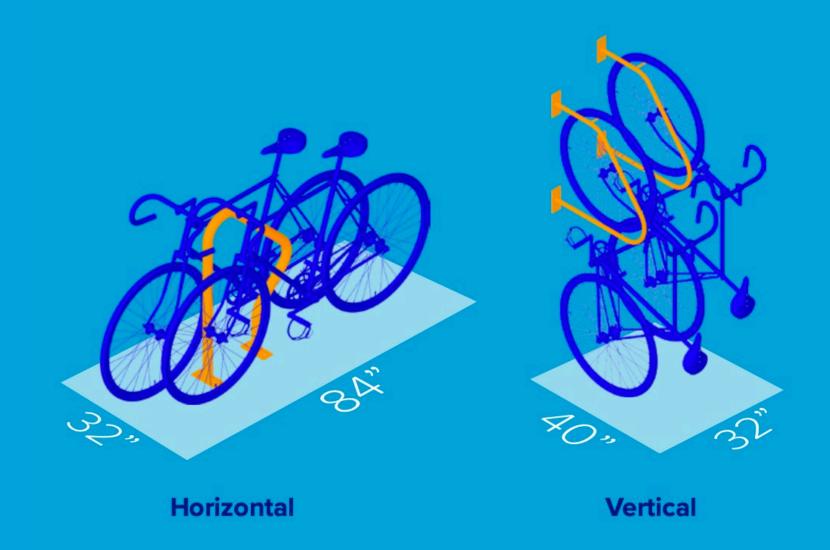
# Include bikes in your layouts!



### Include bikes in your layouts!

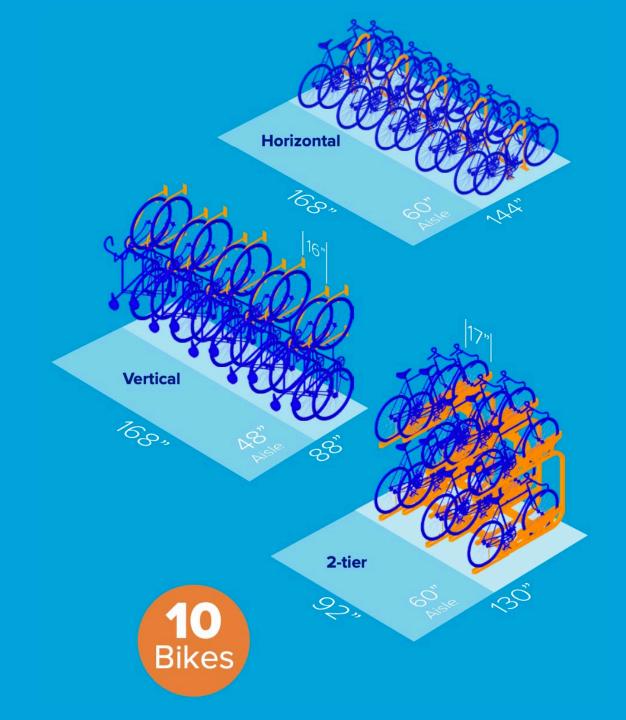


### **Optimizing Capacity and Space Use**



### **Room to Move**

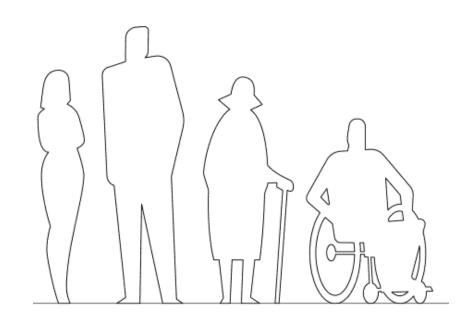
- Single aisle is the simplest layout
- Employ a mix of bike parking types to accommodate as many bikes and people as possible
- Work from a design that can be scaled over time if needed (tight budget)
- Amenities (variable):
   maintenance station; bench;
   storage locker; signs; shower
   bathroom; ART
- Floor AND MEP layouts need to be clear



### **Consider All Users**



**Different Spokes** 



Different Folks

### ADA Compliance

#### **Post Mounted Objects**

12" maximum overhang when located between 27" and 80" (vulnerability zone) above the finish floor

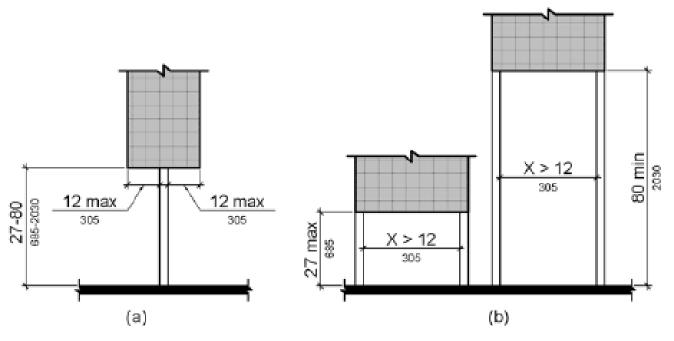


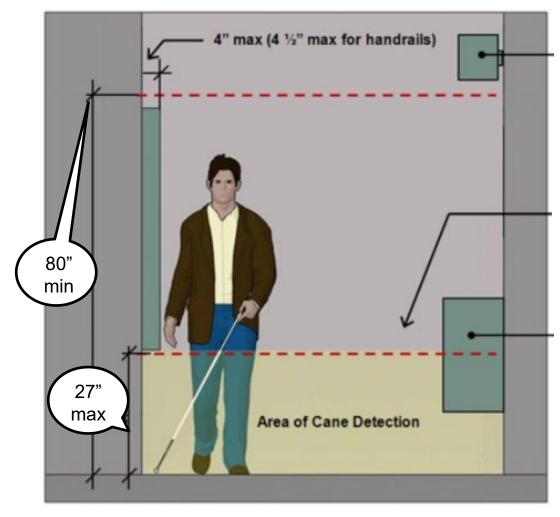
Figure 307.3 Post-Mounted Protruding Objects

### ADA Compliance

Limits of Protruding Objects 307.2

"Shoreline" & Circulation paths

Objects mounted on walls, partitions, columns, and other elements can pose hazards

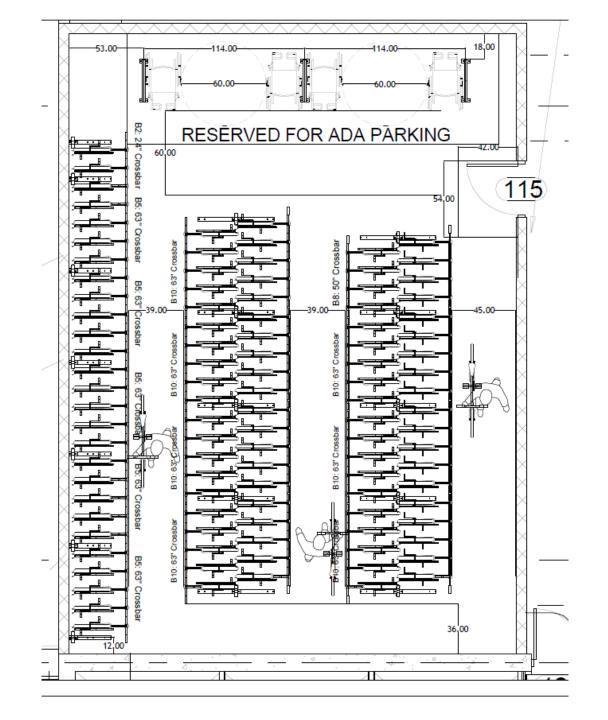


Objects above headroom clearance can protrude any amount.

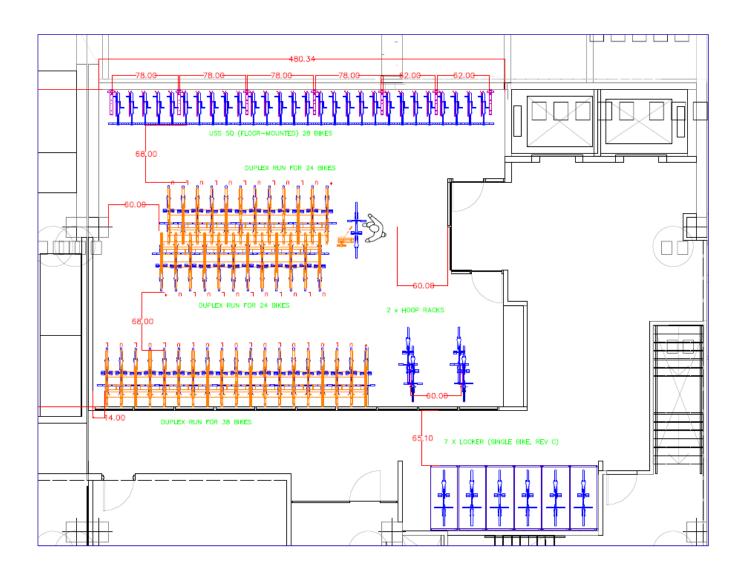
Protruding objects cannot Reduce the minimum width of accessible routes.

Objects with leading edges within cane sweep can protrude any amount.

## ADA Sample Layout



# Sample Layout



## **Quality Standards**



## **Quality Standards**



## **Quality Standards**



**Local Ordinances** 

#### **Common Pitfalls**



Not enough parking options



Not enough aisle space



Insufficient lighting



Poor access

### Due Diligence



- How well are vendors able to provide guidance about their products and the choices associated with them?
- Warranty terms?
- Control of manufacturing?
- Value added services like CAD layouts and access to common file types of products to easily upload in the design phase of your projects?
- Do the people designing and selling the bike racks use bikes for transportation?
- Videos that demonstrate how some of the more complex systems function?

## **Example Project**

**Ponce City Market** *Atlanta, GA* 

- Mixed use development
- Horizontal and vertical
- Horizontal, tiered
- Public, bike valet, and reserved







## **Example Project**

**Green Building Alliance** *Pittsburgh, PA* 

- Dream Bike Room
- Whimsical & Fun





### **Example Project**

Trek Development Pittsburgh, PA



### **Looking to the Future**



#### Resources

- Bicycles at Rest –<u>www.bicycleparkingonline.org</u>
- Victoria Transportation Policy Institute -<a href="http://www.vtpi.org/tdm/tdm85.htm">http://www.vtpi.org/tdm/tdm85.htm</a>
- Essentials of Bike Parking <u>www.apbp.org</u>
- Dero Bike Parking Guide <a href="https://www.dero.com/bike-parking-guide/">https://www.dero.com/bike-parking-guide/</a>
- Dero Bike Room Design Guide <a href="https://www.dero.com/bike-room-design-guide/">https://www.dero.com/bike-room-design-guide/</a>
- San Francisco Planning Department <a href="http://sf-planning.org/bicycle-parking-requirements">http://sf-planning.org/bicycle-parking-requirements</a>
- Pittsburgh Department of Planning -<u>http://pittsburghpa.gov/dcp/bicycleparking</u>
- Look for Master Plans in the region you're working to learn more about the communities vision for the role of bikes in mobility. Bike parking goes hand in hand with mobility plans.

## Questions