## 1. Technical Features Bike Rack

## 2 Position Modular Bike Rack Assembly

Byk-Rak Technical Features	Advantages
• The Byk-Rak is 30 inches deep by 55 inches wide.	<ul> <li>The Byk-Rak is large enough to hold adult- sized bikes (excluding tandem and recumbent) and designed to hold smaller bikes—down to a children's size of 16" diameter wheels.</li> </ul>
<ul> <li>The Byk-Rak weighs less than 30 pounds.</li> </ul>	• The Byk-Rak meets OSHA standards for lifting by a single individual, and anyone can raise or lower with one hand, ensuring convenient operation.
<ul> <li>The Byk-Rak can be lowered or raised with one hand.</li> </ul>	• This leaves the other hand free to stabilize the bike so the rider can operate the Byk-Rak independently.
All parts of the Byk-Rak are finished with powder coat paint. Stainless Steel Bike Racks are either bead blasted for a Non- Glare finish or Electro- Polished for a Chrome like finish.	<ul> <li>Powder coat painting provides corrosion resistance and will not flake off. It can chip, but that chip will not increase in size. This method of painting is also more environmentally safe than traditional methods. Very little Maintenance is needed on the Stainless Steel bike racks.</li> </ul>
All moving parts on the Byk-Rak are made of stainless steel.	Stainless steel is corrosion resistant and will not chip like plated or coated steel.
The Byk-Rak is mounted to the front of the bus.	• Front-mounting the carrier increases driver visibility, safety, and security.
The Byk-Rak has two locking positions, stowed and deployed.	<ul> <li>In the stowed position the Byk-Rak protrudes minimally for increased maneuverability. Locking the carrier minimizes shaking.</li> </ul>
• The Byk-Rak has rounded outside corners, smooth welds, and few 'pinch' joints.	<ul> <li>These safety features lessen the likeliness of an operator being injured.</li> </ul>
<ul> <li>The Byk-Rak does not block wipers or access panels in the stowed position.</li> </ul>	• The carrier mounts to right to the bumper and bikes are held far enough away to not interfere with wipers or access panels.
• Bikes can be unloaded from the sidewalk- side or front of the Byk-Rak.	• Bikes never need to be unloaded from street- side so the user is not exposed to traffic.
Bikes can be independently loaded or unloaded.	• This allows either bike slot to be accessed at any time.

Technical Features Con't	<u>Advantages</u>
The Byk-Rak is constructed to support over 250 pounds in the central portion.	• This allows the carrier to easily hold heavy bikes and provides for misuse, such as someone climbing on to it to reach a mirror or window.
Bikes are secured solely by the front wheel lock.	<ul> <li>This means loading and unloading times are under 10 seconds so use of the Byk-Rak will not affect scheduling.</li> </ul>
• The Byk-Rak only makes contact with the tires of the bicycle.	<ul> <li>Bike frames or other parts will not be scratched or damaged.</li> </ul>
<ul> <li>The Byk-Rak accepts bicycles without any orientation of the pedals.</li> </ul>	<ul> <li>This speeds up loading times because the user need not adjust the pedals to miss any part of the Byk-Rak.</li> </ul>
The Byk-Rak has no pins, clips, or straps.	There are no loose parts to break down or become lost. This also contributes to the fast loading time.
The Byk-Rak has few parts.	<ul> <li>A simple construction ensures ease of use and high reliability.</li> </ul>
The wheel lock folds away when stowed.	• The wheel lock folds into the center of the Byk-Rak automatically so it will not damage the front of the bus.
• The bumper mounting bracket is adjustable via multiple bolt-holes.	<ul> <li>The Byk-Rak's height can be adjusted for different buses or routes.</li> </ul>
The Hinge Bracket is designed to attach to all mounting brackets similarly.	<ul> <li>The Byk-Rak can be installed on any bus through the use of different mounting brackets.</li> </ul>
Bike Rack will have removable rails that can be replaced with a modular component. These rails are interchangeable for front or back	<ul> <li>With this design racks that have been damage to the rail component can be replaced without replacing the entire rack.</li> </ul>