

BIKE ANGLE MOUNT RAIL SYSTEM

INSTRUCTION & INSTALLATION GUIDE MANUAL

ENHANCE BIKE STORAGE

WHEELSONRAIL

OUR STORY

It all started with the issue of storing my 2 bikes. I have spent most of my life in riding and enjoying bicycles. Riding for enjoyment, different levels of racing, office commute, and personal transportation. They've been and will always be a part of my life, even if they're difficult to store!

Life changed when I started a family. My partner and I continued to ride and have fun, and we added another bike to the mix. But soon, our three bikes became a storage problem in our home. I began researching ways to store multiple bikes efficiently and explored various options available on the market. However, I found some of systems, but a few of them are expensive and a few are hard to use.

With more than ten years of experience as a professional automation design engineer. I thought, why can't we develop this into a product? I spend a year on developing and use the system. Subsequently, I refined my idea, released new parts, conducted extensive testing, and eventually we built the solid system. Designed with the goal of giving individuals like me access to the greatest vertical bike storage solutions. No compromises in design, manufacturing, quality standards, aesthetics and environmental responsibility.

I love biking and believe in its physical and mental health benefits. I want more people to enjoy biking without storage hassles. So, I offer a dependable vertical bike storage system as a smart solution. My aim is to free people from storage problems and let them live an active life with ease, whether at home or work.



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GENERAL NOTE

These instructions are for installing the Ceiling Mounted BikeRail to a wooden structure like ceiling joists, beams, rafters, or a custom structure. For other products, follow their specific instructions.

WARNING: DO NOT INSTALL THIS KIT INTO PLASTERBOARD ONLY. IT MUST BE ATTACHED TO A STRONG STRUCTURE THAT CAN SUPPORT THE LOAD!

BikeRail is easy to install, but you need some DIY experience to do it safely. Get professional help if needed.

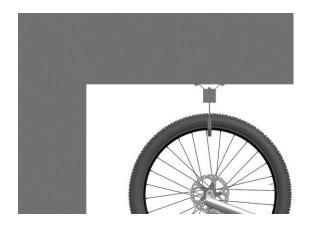
Make sure you install your BikeRail Kit correctly. A poorly installed BikeRail can stop the trolley from working properly and affect your enjoyment.

Each BikeRail Kit holds four average-sized bikes. Add more rails for extra storage or larger bikes.

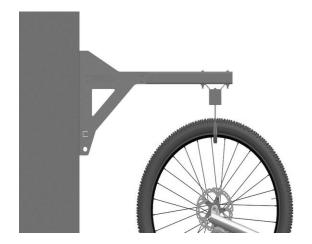
For help, contact our experts or visit www.wheelsonrail.com. Watch our installation video here.

Discover our various mounting options for this versatile system, allowing you to store your bike conveniently at your own pace.

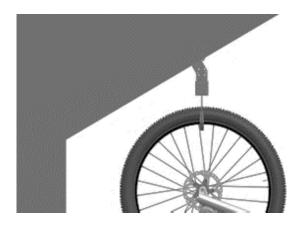
CEILING MOUNTED SYSTEM



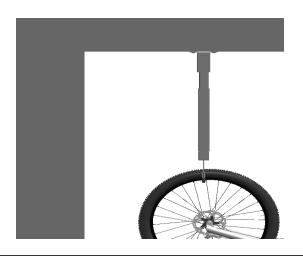
WALL MOUNTED SYSTEM



ANGLE MOUNTED SYSTEM



EXTENDED CEILING MOUNTED SYSTEM





WARNINGS

Suitability for the Structure: Wheelsonrail Products does not take responsibility for the structure to which this product is installed. The customer must ensure the structure is suitable.

Sharp Edges: Despite efforts to remove sharp edges, the rail ends can still be sharp. Handle with care during installation.

Correct Installation: Objects can fall from the BikeRail system if not correctly hung. Ensure proper installation.

Secondary Rail Suspension: Do not suspend a secondary rail from the first rail without ceiling support, even momentarily during installation.

End Caps: Make sure End Caps are secured correctly to prevent Bike Hooks from falling off the BikeRail.

Avoid Impact: Do not bump the End Caps with the Bike Hook during bike movement. They are not designed to absorb heavy impacts.

Shock Loads: BikeRail is not suitable for shock loads. Gently place objects on the Bike Hook.

Children: This product is not a toy and should not be used by children.

Safety Equipment: Always wear appropriate safety equipment when using power tools during installation.

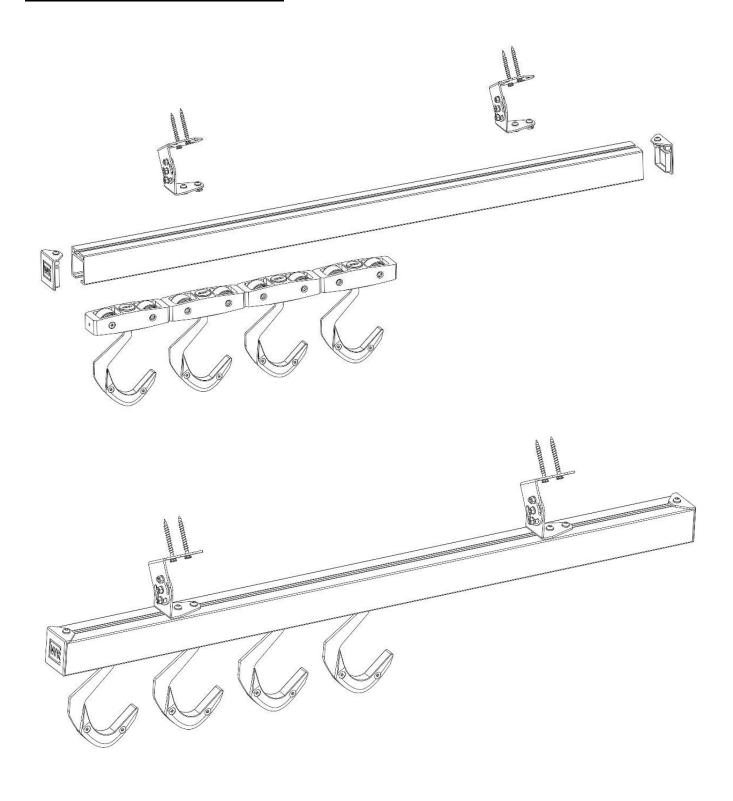
Check Bike: Check that the bike is safe for use and all hanging adapters are removed each time it is taken off the BikeRail.

Human Suspension: NEVER USE FOR HUMAN SUSPENSION!



PARTS IDENTIFICATION

BIKERAIL ANGLE MOUNT SYSTEM





WHAT'S IN THE BOX

PARTS NAME	IMAGE	QTY
Bike Rail		1
Angle Bracket Fixed		2
Angle Bracket Rotator		2
End Cap		2
Rail Connector		Depends upon your ordering
Bike Hook		Depends upon your ordering
Wood Screw		4
M5 Washer		4



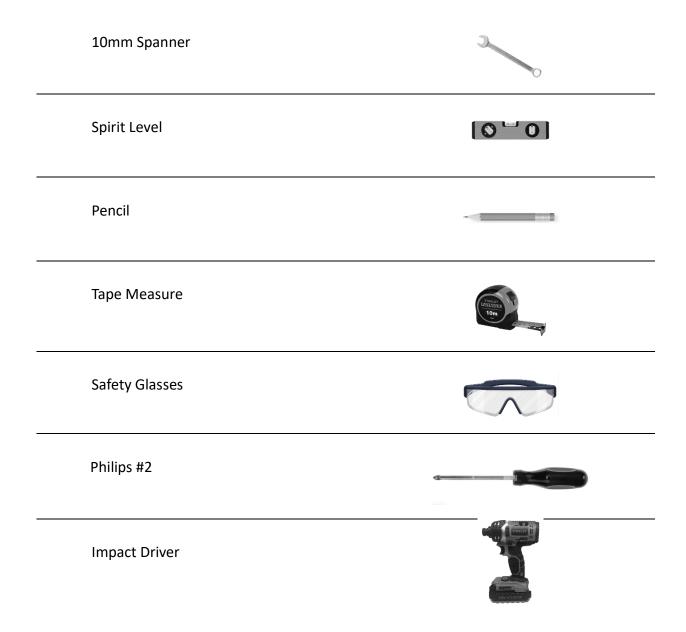
M6X16 Hex Socket Button Head Cap Screw		6
M6 Nyloc Nut		6
M6X12 Hex Socket Button Head Cap Screw		6
M6 Washer		18
M6 T-Nut		6
6X60 Wall Plug	5358	4

Note: The above parts list includes one BikeRail system. The hook may vary depending on your order. The rail connector is included only with the 2 BikeRail system. And wall plugs may be optional or necessary, depending on the installation surface.



TOOLS REQUIRED

As a cyclist, we expect you to already have most of the tools needed for this installation.



NOTE: A helper and Stud finder are not essential but will make the installation process easier and safer.



SYSTEM CONFIGURATION LAYOUT

MOUNTING POSITION

Your BikeRail Kit can be installed in various settings, but you should follow a few essential mounting guidelines:

BE MINDFUL OF WATER, GAS PIPES, AND ELECTRICAL CABLES. ALWAYS CONSULT A PROFESSIONAL IF IN DOUBT.

Each rail requires suspension from at least two Rail Mounts, each secured with two Screws and two Washers. You can add more Rail Mounts for extra support.

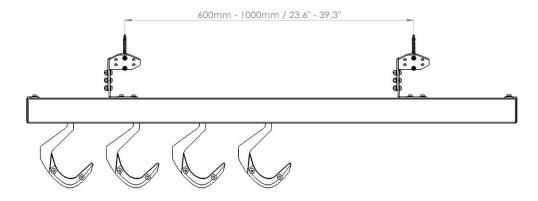
Choose structurally sound mounting points to ensure a flat, parallel installation. Use a spirit level to check. For angled ceilings or wall mounts, refer to the manufacturer's website for alternative solutions.

Supplied screws need at least 50mm (2 inches) of thread engagement in solid timber for full strength. For non-timber structures, you'll need to use your own fixings.

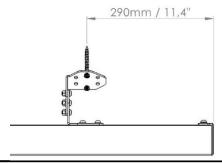
Rail Mounts are adjustable and should be spaced 600mm to 1000mm (23.6 to 39.3 inches) apart. Common beam or joist spacing in buildings is 400mm (15.7 inches), 500mm (18.7 inches), or 600mm (23.6 inches). Use a Stud Finder to ensure accurate support structure location, especially with boarded ceilings. Incorrect placement can lead to failure in supporting BikeRail's load.

The maximum cantilever length from the center of the Ceiling Plate to the Rail's end is 290mm (11.4 inches).

Rail Mount spacing: 600mm - 1000mm (23.6" - 39.3")



Maximum cantilever length: 290mm (11.4")



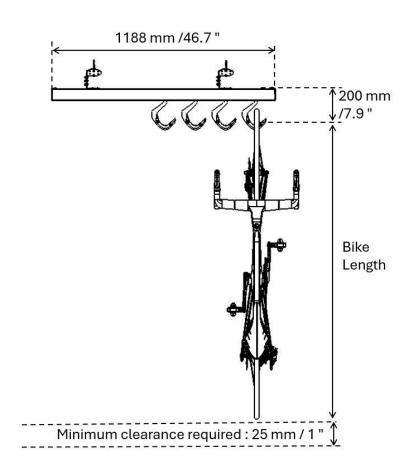


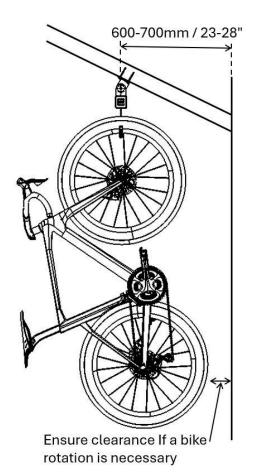
MOUNTING HEIGHT AND PARALLEL MOUNTING TO THE WALL

Ensure you are tall enough height to hang your bikes with the wheels off the floor. The Rail and Bike Hook needs 200mm (7.9 inches) of height allowance from the ceiling to the inside of the bike's wheel rim where the bike wheel touches.

The distance to mount your BikeRail's Kit from any parallel wall depends on the size of your bikes and whether rotation is required once hung.

- 1. Measure the largest bike you plan to store to ensure it can spin freely once hung. For bikes with wide handlebars, consider this dimension as well.
- 2. For optimal rail performance, bikes should not rest against the wall once hung. However, this is possible if the hooks are not excessively angled in the rail and are not contacting the internal rail edge.
- 3. Generally, the Rail is typically mounted between 600 700mm (23.6 28 inches) from any walls or other objects to ensure bikes can spin and slide freely.

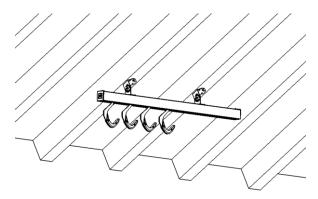






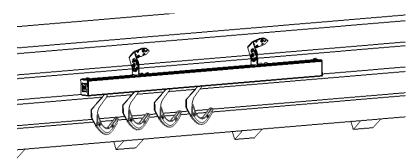
MOUNTING ACROSS BEAMS

Ideally, each rail should be installed across a minimum of two separate load-bearing beams to distribute the system's weight effectively.



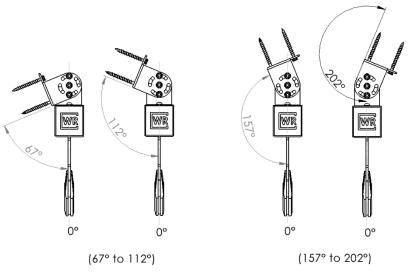
MOUNTING INLINE BEAMS

Rail Mounts can be rotated 90 degrees to align with BikeRail and structural beams when installed parallel to joists or beams. In this case, the rail should be slide into place once the Rail Mounting bracket have been attached to the beam.



ANGLE MOUNT

The Angled Ceiling Mounts can be installed on angled surfaces ranging from 67° to 112° and 157° to 202°. To adjust the angle, simply loosen or remove the bolts, set the desired angle, and then re-tighten all the bolts.

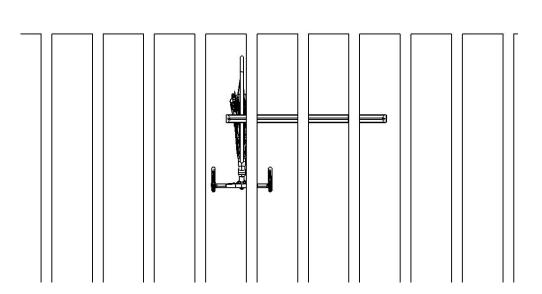




SUGGESTED MOUNTING POSITIONS

OPEN AND FREE SPACE

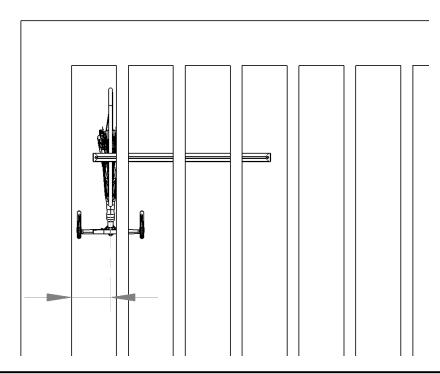
The BikeRail Kit offers flexibility in mounting, allowing parallel placement with a wall on both ends.



IN A CORNER

For corner installation, it's crucial to ensure the handlebar of the last bike doesn't make contact with the adjacent wall.

Measure the bike's length from the middle of the stem to the handlebar tips. To optimize rail utilization, use this measurement to position your BikeRail and make sure it is far enough away from the wall. We suggest placing the last bike's handlebar in close contact to the wall, without really touching it.



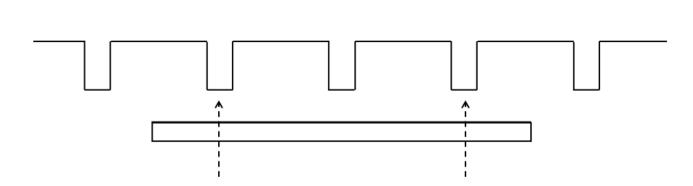


INSTALLATION

CHECK THAT THE SELECTED LOCATION CAN SUPPORT ALL RAILS

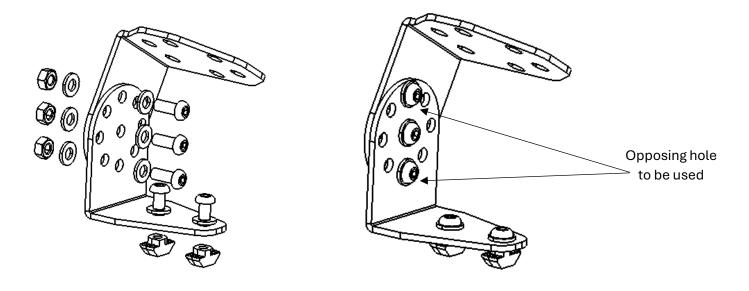
The rail kit must be screwed into a solid structure, not just plasterboard!

- > Ensure mounting points are flat, solid, and parallel. Use a spirit level to check.
- Measure the distance between mounting points to ensure they are suitable.
- For multiple rails, make sure all mounting points are suitable for additional rails.



ASSEMBLE- RAIL MOUNTING BRACKET

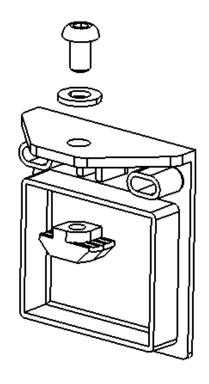
Insert the M6 x 16mm bolt with a washer into the angle bracket rotor and attach it to the fixed angle bracket using a washer and a nyloc nut. Loosely tighten the nyloc nut. And Insert the M6 x 12mm Hex Bolts through the M6 Washers and Rail Mounting bracket holes, then loosely screw them into the T-Nuts. Do not fully tighten.

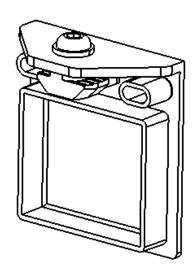




ASSEMBLE- END CAP

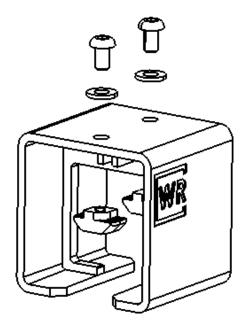
Insert the M6 x 12mm Button head Allen to End Cap holes, then loosely screw them into the T-Nuts. Do not fully tighten.

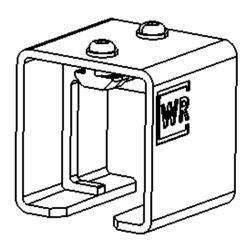




ASSEMBLE- RAIL CONNECTOR

Insert the M6 x 12mm Button head Allen to Rail connector holes, then loosely screw them into the T-Nuts. Do not fully tighten.



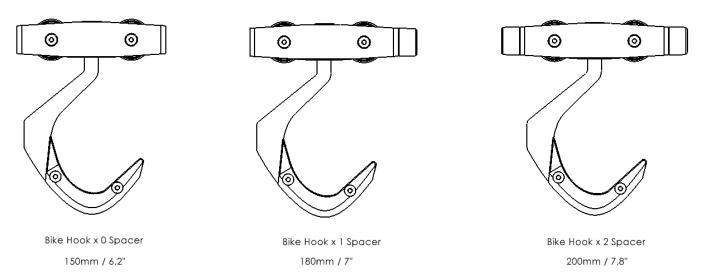




ASSEMBLE AND PREPARE – TROLLEY UNIT (BIKE HOOK)

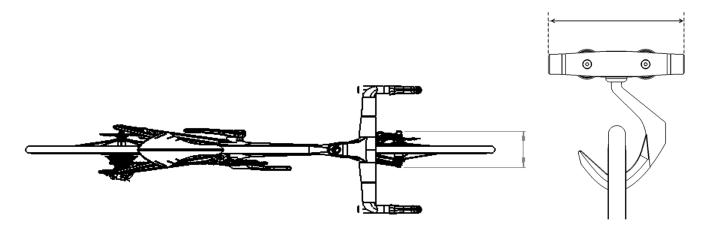
ADJUST TROLLEY WIDTH

You may adjust the width of your trolley to suit every bike and reduce the possibility of damage from compact storage.



MEASURE BIKE WIDTH

Measure the widest point of your bike at the front wheel axle. This will help you decide if you need spacers to keep it separated from other bikes when storing it in the trolley.



INSTALL SPACERS IF REQUIRED

If you plan to use the Trolley in the middle with another Trolley on each side, follow these guidelines:

- If the bike width is less than 160mm (6.2"), do not use spacers.
- ➤ If the bike width is more than 160mm (6.2"), use spacers on both ends.

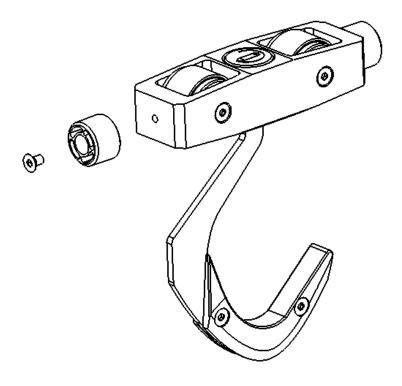
If you are using the Trolley at the first or last position, with a Trolley on only one side, follow these guidelines:



- > Do not use a spacer on the side next to the End Cap. This will give you the most usable length of the Rail.
 - > If the bike width is more than 160mm (6.2"), use one spacer on the side facing another Trolley.

BIKE WIDTH (MAX WIDTH OF FRONT FORK)	CENTER HOOK	FIRST/ LAST HOOK
< 160mm / 6.2"		
	No Spacer	No Spacer
> 160mm / 6.2"	2 x Spacer	1 x Spacer (Beside the other bike)

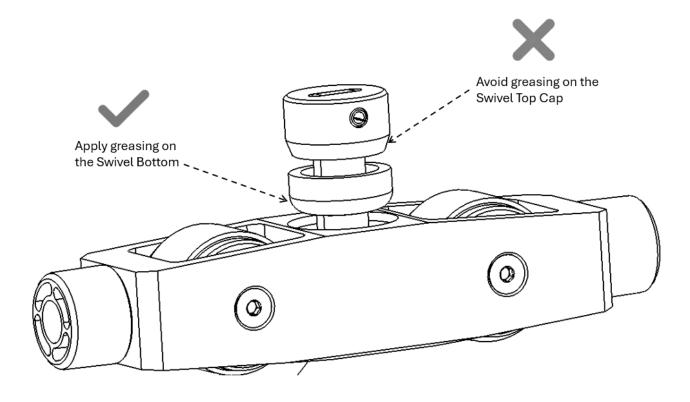
Attach the spacers using the 4mm countersink screw with 4mm Allen key.



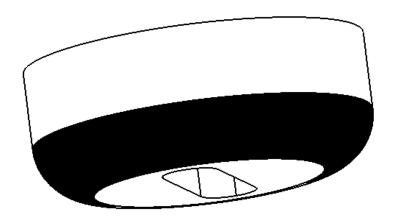


TROLLEY UNIT- SWIVEL BOTTOM GREASING

Always apply grease to the Swivel bottom before first use. Avoid getting grease on the Swivel top cap area as it will reduce the mechanism's performance.



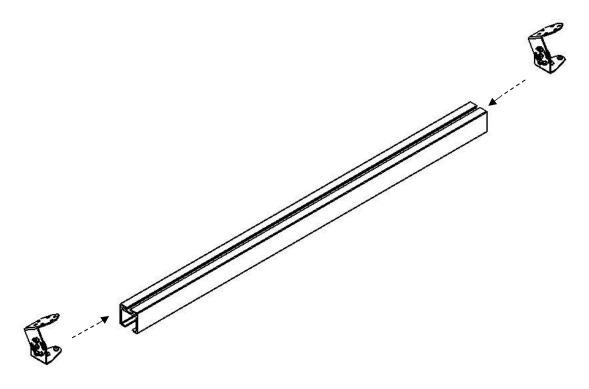
Note: The highlighted black area needs greasing



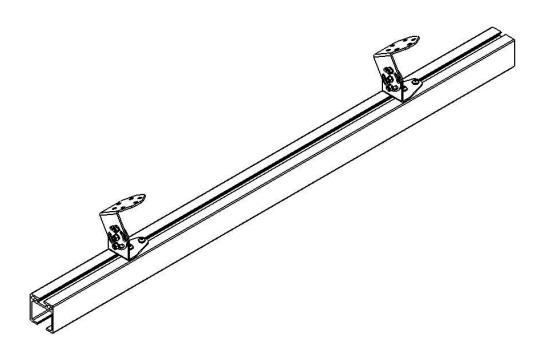


INSERT AND SLIDE RAIL MOUNTING BRACKET TO THE REQUIRED POSITIONS

Insert and slide the Rail Mounting bracket into the Rail by aligning and inserting the T-nut into the central section of the top of the Rail.



Slide Rail Mounting bracket to positions between 600 mm - 1000 mm (23.6" - 39.3") or Maximum cantilever length 290mm (11.4") and loosely tighten with 10mm Spanner.



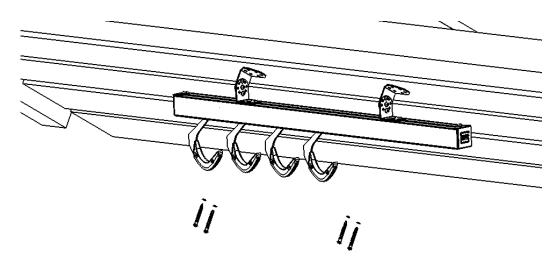


SLIDE RAIL MOUNTING BRACKET TO THE REQUIRED POSITION

Align the Rail Mounts with your mounting sites by holding the rail in the proper place on the ceiling.

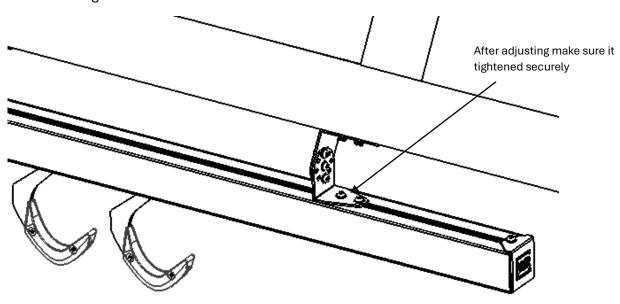
If fixing to wood, use four wood screws and four cup washers to secure the rail mounts to the ceiling. If fixing to non-timber structures, use the proper fasteners (not included).

Note: Verify that the rail is straight, parallel to any nearby objects, and untwisted, bent, or deformed during installation. Make sure with a spirit level. To achieve proper alignment, you might need to place shims or stuffing items underneath the rail mounts.



MAKE FINAL ADJUSTMENTS AND FULLY TIGHTEN

If necessary, adjust the rail position by loosening the M6 Hex Bolts. After positioning, evenly tighten all M6 Hex bolts to full tightness.

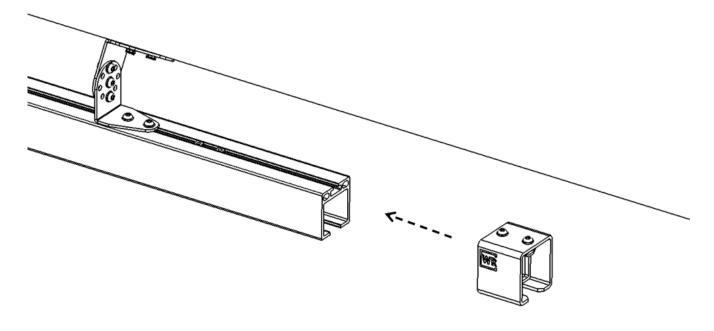




INSTALL ADDITIONAL BIKERAIL KIT

If applicable,

Before attaching the second rail to the mounting structure, connect the rail joiner to the rail and loosely tighten the M6 x 12mm bolts to hold it in place.



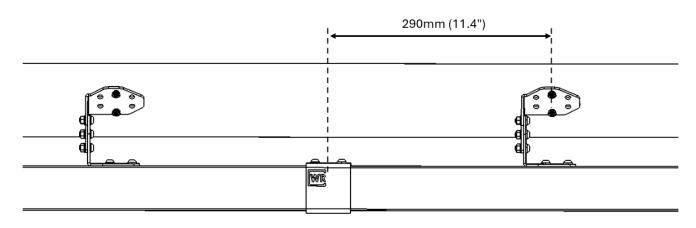
Check where the second rail will go. Attach the rail mounts to the second rail.

Attach the second rail to the first rail, making sure it is well supported. Check the mounting locations and repeat the installation process.

Do not rely on the joiner alone to support the second rail!

Ensure both rails are parallel and aligned. Screw the second rail to the ceiling and evenly tighten the bolts in the joiner.

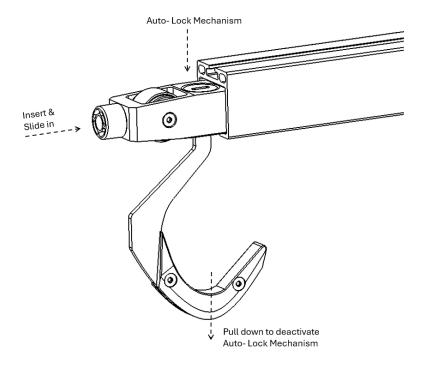
WARNING: DO NOT MOUNT IF THE CENTER OF THE CONNECTOR IS MORE THAN 290MM (11.4") AWAY FROM THE CENTER OF A RAIL MOUNTING BRACKET.





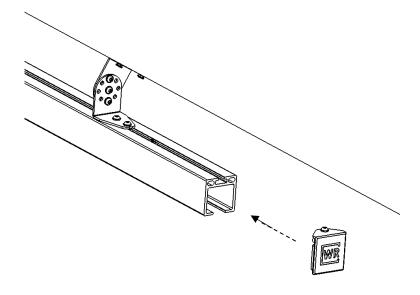
INSERT TROLLEY TO RAIL

- Align the Trolley's first wheel with the opening in the Rail and insert it. While holding down the Hook mechanism, support the Trolley and push it into the Rail.
- If the Trolley doesn't go in, the mechanism isn't pulled down fully, and the Top Cap is blocking the way.
- Pull the Hook down and ensure the Trolley moves smoothly along the Rail.



INSERT END CAP

Align T-nuts to Rail and slide End Cap into Rail and tighten Bolts equally with a 10mm Spanner. Check all components have been securely tightened.





FREQUENTLY ASKED QUESTION

Do you deliver to my country?

Absolutely! We ship to all countries through our trusted delivery partner, xxxxx.

What is the length of each rail section?

Each rail section measures 1188 mm or 46.7 inches.

Does the BikeRail kit include all necessary installation components?

Yes, our complete kit provides everything required to set up your bike storage system hassle-free.

Can I hang a Fat Bike on it?

Our standard hooks accommodate tires up to 3 inches. We're also developing hooks for larger tires, specifically designed for 4 to 5-inch tires.

How far from the wall should the BikeRail be mounted?

For optimal functionality, we recommend 600-700mm if you plan to hang and rotate your bikes. If rotation isn't necessary, the rail can be mounted closer to the wall, with a minimum distance of around 550mm.

What tools are necessary for installation? Are they included?

In line with our environmental commitment, we've chosen not to include disposable tools. However, our instruction manuals list the simple tools required for installation.

WARRANTY / RETURNS

Our products come with a comprehensive 2-year unlimited use warranty, applicable even in commercial and workshop environments. Refer to our warranty policy for complete information.

We design our products for easy servicing, guaranteeing their longevity in operation. Should you need replacement parts beyond the warranty duration, they are readily purchasable on our website.

If you have problems with your product or questions, Kindly contact us for support.



MAINTENANCE

Your Rail Kit is generally very low maintenance and should provide years of reliable use. Here are some basic maintenance tips:

Rail Maintenance: Keep the Rail clean and free from debris, especially on the surfaces where the Bike Hook wheels run. This prevents wear and ensures smooth operation.

Cleaning Method: Use a soft cloth to wipe the Rail. For hard-to-reach areas, consider using compressed air to remove debris.

Hook Maintenance: Regularly grease the bullet on the hook to maintain its longevity. Be careful to avoid getting grease on the top cap to prevent dirt accumulation and ensure proper functioning.

PERIODIC CHECKS

Perform these checks periodically to ensure the safety and functionality of your bike storage system:

Mounting Area: Inspect the structural integrity of the area where the Rail Kit is mounted. Look for signs of wear, damage, or any compromise in stability.

Bolts and Screws: Check the tightness of all bolts and screws. Tighten any that may have become loose over time to maintain the stability of the system.

Wheels and Impact Areas: Examine all components, especially the wheels and impact areas, for any signs of wear or damage. Replace any worn-out parts to prevent malfunction.

Trolleys: Ensure that the trolleys move freely when loaded. If they are not moving smoothly, inspect for obstructions or damage and address accordingly.

Spring Mechanisms: Test the spring mechanisms to ensure they function correctly when unloaded. Proper spring tension is crucial for the reliable operation of the system.

NOTE: BY FOLLOWING THESE MAINTENANCE AND PERIODIC CHECK GUIDELINES, YOU WILL ENSURE THE LONGEVITY AND RELIABILITY OF YOUR BIKE STORAGE SYSTEM, PROVIDING A SECURE AND CONVENIENT SOLUTION FOR BIKE STORAGE.



NOTES

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