

# ***6 THINGS*** ***YOU MUST KNOW BEFORE*** ***BUYING ROOF RACKS***

**MANUFACTURERS DON'T WANT YOU TO KNOW NUMBER 3**





# *INTRODUCTION*

**Roof racks are accessories that often go unnoticed—until you need them.**

As a result, many people are unaware of the range of options available on the market. In this overview, we'll explore the different styles of roof racks, including variations in fitting methods, width, shape, and limitations. Please note that this information is intended as general guidance only and should not be considered personal or specific advice.



# 1

## ***UNDERSTAND THE DIFFERENT CHOICES AVAILABLE***

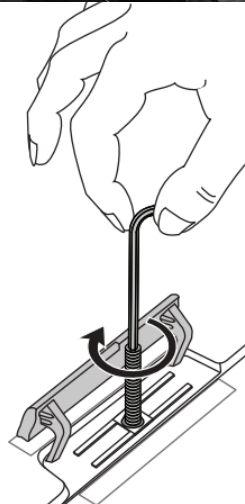
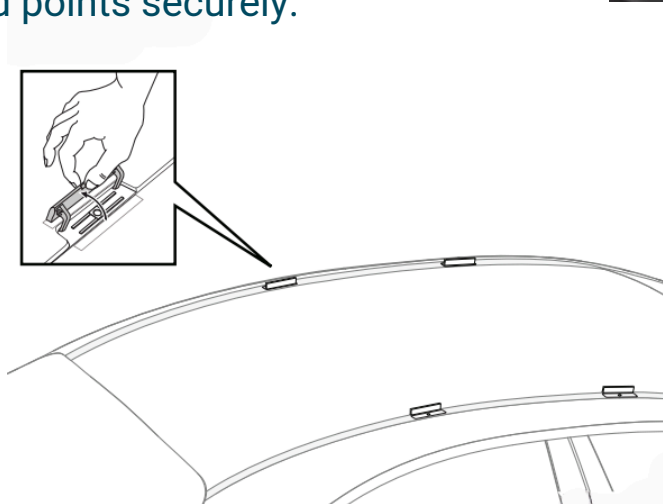
### **1. CLIP ON STYLE**

This style attaches to the vehicle by clamping around the door jambs—typically at the front and rear passenger doors. Because roof contours and door designs vary across makes and models, these racks are not universal and require a vehicle-specific ‘fitting kit’. They are easily removable when not required, making them a non-permanent solution.



### **2. FIXED POINT MOUNT**

Commonly found on sedans, hatchbacks, and wagons, fixed points are dedicated mounting locations built into the vehicle. These points are often hidden under plastic covers. Each vehicle has a unique configuration, so a specific fitting kit is required to connect the roof rack legs to the fixed points securely.





### **3. TRACK SYSTEMS**

Tracks are aluminium strips installed along the roof of the vehicle, often found on late-model cars. Installation involves drilling and permanently riveting the tracks to the roof. Roof rack legs then slide along the tracks, offering excellent adjustability. For example, you can position the racks closer together to carry a short step ladder during the week, and further apart to transport a long surfboard on the weekend.



### **4. GUTTER MOUNT**

Designed for vehicles with protruding side gutters—such as vans and older 4WDs—this system offers a strong foundation. Gutter-mounted racks are simple to install and remove, making them ideal for users who want a non-permanent yet robust solution.



## 5. RAIL MOUNTED (RAISED OR SOLID/FLUSH RAILS)

Roof rails run from front to back along the roof and are commonly found on 4WDs, SUVs, and wagons. Roof rack legs attach by clamping onto the rails. This method is simple to install and remove, offering convenience and versatility.



Flush rail



Raised rail

## 6. INTEGRATED MOUNTING SYSTEMS

These systems mount directly to factory roof points or the roof itself, distributing the load evenly across the vehicle's body. It's a sleek, high-capacity solution that pairs perfectly with platform style roof racks or bars. This system enhances load-carrying capability while maintaining a clean, integrated look. Accommodating the contours and mounting points on the roof, this style is vehicle specific.





# *BAR WIDTHS*

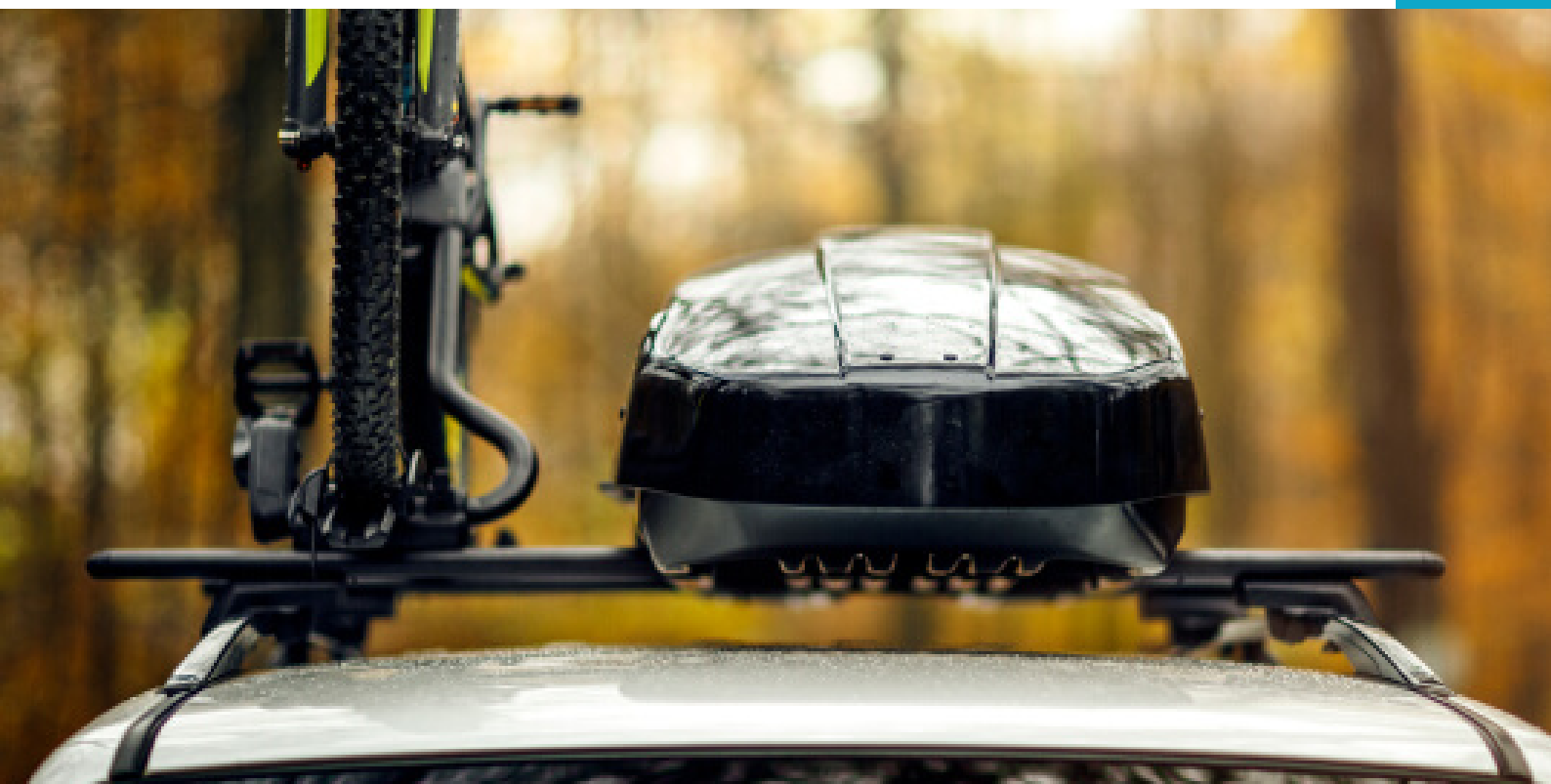


## **OVERHANG STYLE**

The overhang style features crossbars that extend beyond the roof rack legs. This design offers several practical advantages:

- **Maximum width:** The extra width allows you to transport more items—e.g. fitting two kayaks side by side instead of just one.
- **Ideal for Accessories:** Perfect for mounting side awnings or other gear that benefits from extended width.
- **Easier Load Management:** The extra bar width makes it simpler to tie down and secure your cargo.

This style is popular among outdoor enthusiasts and tradespeople who need maximum versatility.





# BAR WIDTHS

## FLUSH STYLE

The flush style has crossbars that end within the roof rack legs, creating a sleek and integrated look. Key benefits include:

- Streamlined Appearance: Offers a clean, modern aesthetic that complements your vehicle's design.
- Improved Aerodynamics: Reduces wind resistance and noise while driving.
- Same strength, different style: Despite the compact design, flush bars carry the same maximum weight as overhang bars.

This style is ideal for those who prioritise style and efficiency without compromising functionality.





# 2 THE BIGGEST MISCONCEPTION

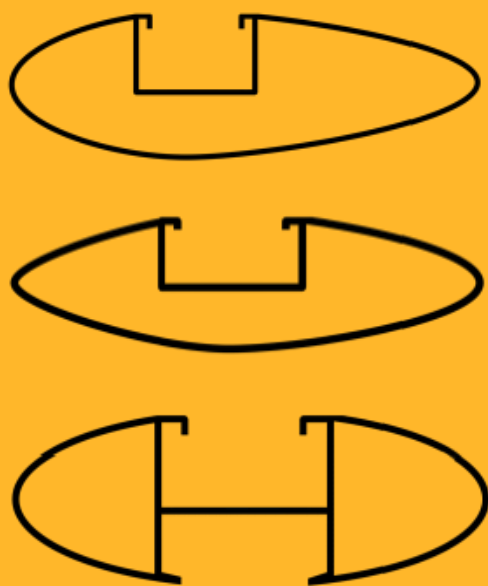
## ROOF BAR OPTIONS

Each brand offers a selection of roof bar shapes, which influence both the visual appeal and aerodynamic performance of the roof rack system.

Contrary to popular belief, the shape of the bars—excluding entry-level budget options—does not affect the overall load-carrying capacity of a roof rack.

Bars advertised as 'Heavy Duty' offer a rugged look and more robust design, however, do not offer greater carrying capacity compared to 'aerodynamic' styles.

This important detail will be explained further in point 4 of this brochure.



# COLOURS

## CHOICE OF BLACK OR SILVER

Most roof rack brands offer a choice between black or silver roof bars. In many cases, both colours are priced the same, however some brands may charge differently depending on the finish.

The bars are typically made from durable alloy and anodized in either black or silver to enhance scratch resistance and longevity.

Additionally, most bars feature a rubber insert in the top channel, allowing accessories to be mounted without the need to drill into the bar—making installation cleaner and easier.





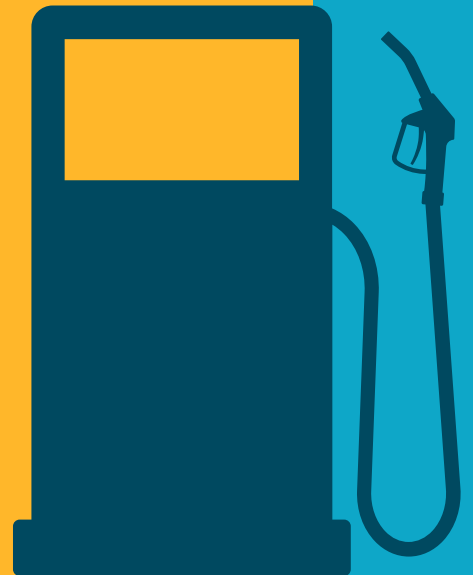
# 3 *ROOF RACKS WILL IMPACT YOUR FUEL ECONOMY*

## **AERODYNAMICS & FUEL EFFICIENCY**

Roof racks do affect a vehicle's aerodynamics. At highway speeds (e.g. 100 km/h), a typical roof rack can increase drag by approximately 3N, while the most aerodynamic models may only add around 1N.

For everyday commuting, this added drag has minimal impact on fuel consumption—so small that you're unlikely to notice any difference at the bowser.

For long-distance travel (such as interstate trips), if the roof racks are not in use, removing them would likely improve aerodynamics, reduce wind noise, and slightly reduce fuel consumption.



## **WHY ROOF RACKS ARE WORTH IT**

Our clients consistently find the benefits of roof racks far outweigh the minor aerodynamic sacrifice. Carrying gear on the roof can:

- Free up seats inside the vehicle
- Increase comfort for passengers
- Eliminate the need for towing a heavy trailer

Most roof rack systems are designed for easy DIY installation/removal and commonly include locking mechanisms to prevent theft.

# 4 CARRYING CAPACITY EXPLAINED

**THIS IS ONE OF THE MOST DANGEROUS MISCONCEPTIONS YOU NEED TO UNDERSTAND!**

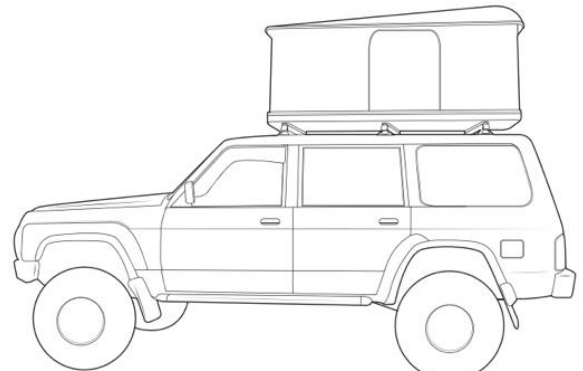
The carrying capacity of a roof rack system is determined by 3 main factors

1. The vehicle manufacturer's specified maximum load rating, which varies depending on make and model.
2. The load rating of the specific roof rack installed
3. The terrain you are travelling on

There are three main categories of carrying capacity to be aware of:

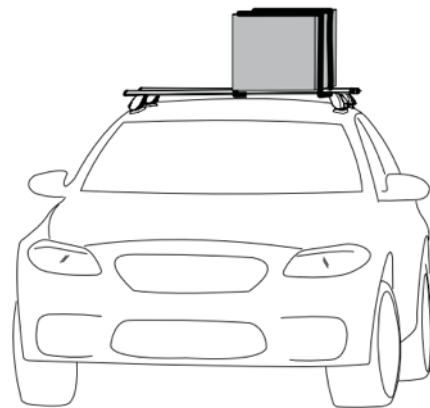
## **Static capacity**

This is the maximum weight your roof rack can safely support while stationary. It's especially relevant when using rooftop tents for example.



## **Dynamic (On-Road) Load Capacity**

This refers to the maximum weight your racks can safely carry while driving on sealed roads. It's the most referenced figure for everyday use.



## **Off-Road Load Capacity**

This is the recommended maximum load while driving on unsealed or rough terrain. Due to increased stress, vibration and movement, this capacity is typically 66% of the dynamic load rating.





# IMPORTANT

Roof racks are engineered and rigorously tested to be strong and durable. In fact, most systems can withstand up to three times their rated static load capacity. However, it's crucial to understand:

**Exceeding the manufacturer's recommended load capacity while driving is illegal and extremely dangerous.**

Too much weight on the roof can compromise your vehicle's stability, increasing the risk of accidents—especially at higher speeds or during emergency manoeuvres.

## Example: Rooftop Tent Usage

Most vehicles can safely carry a 50kg rooftop tent without exceeding their **dynamic load capacity**. Once parked, the roof rack can support the **static load** of the tent plus **two adults**, even though this will exceed the dynamic load capacity. This is safe because the vehicle is stationary and not subject to the forces of driving.



# 5

# *WHAT HAPPENS WHEN I BUY A NEW CAR?*

## **CAN YOU TRANSFER ROOF RACKS BETWEEN VEHICLES?**

The answer depends on several key factors:

### **1. Vehicle Compatibility**

Which vehicle are you removing the bars from, and which one are you fitting them to? The width of the roof is a major consideration. If both vehicles have similar roof widths, there's a higher chance the bars will be compatible.

- Overhang-style bars offer more flexibility, as their extended width can accommodate slight differences between vehicle sizes.

### **2. Roof Rack Type**

What style of roof rack system are you currently using? Compatibility often depends on the mounting style (refer to the 6 mounting styles in Point 1 of this brochure). If both vehicles use the same mounting method, the chances of a successful transfer increase.

### **3. Same Make & Model**

If you're transferring racks between different years of the same make and model (e.g. from a 2015 Toyota Hilux to a 2020 Hilux), there's a good chance the racks will fit. You may only need minor spare parts such as new rubbers, clamps, or updated tracks.

Depending on factors such as brand, age, and style, often we can identify options that allow you to reuse at least some of your existing components

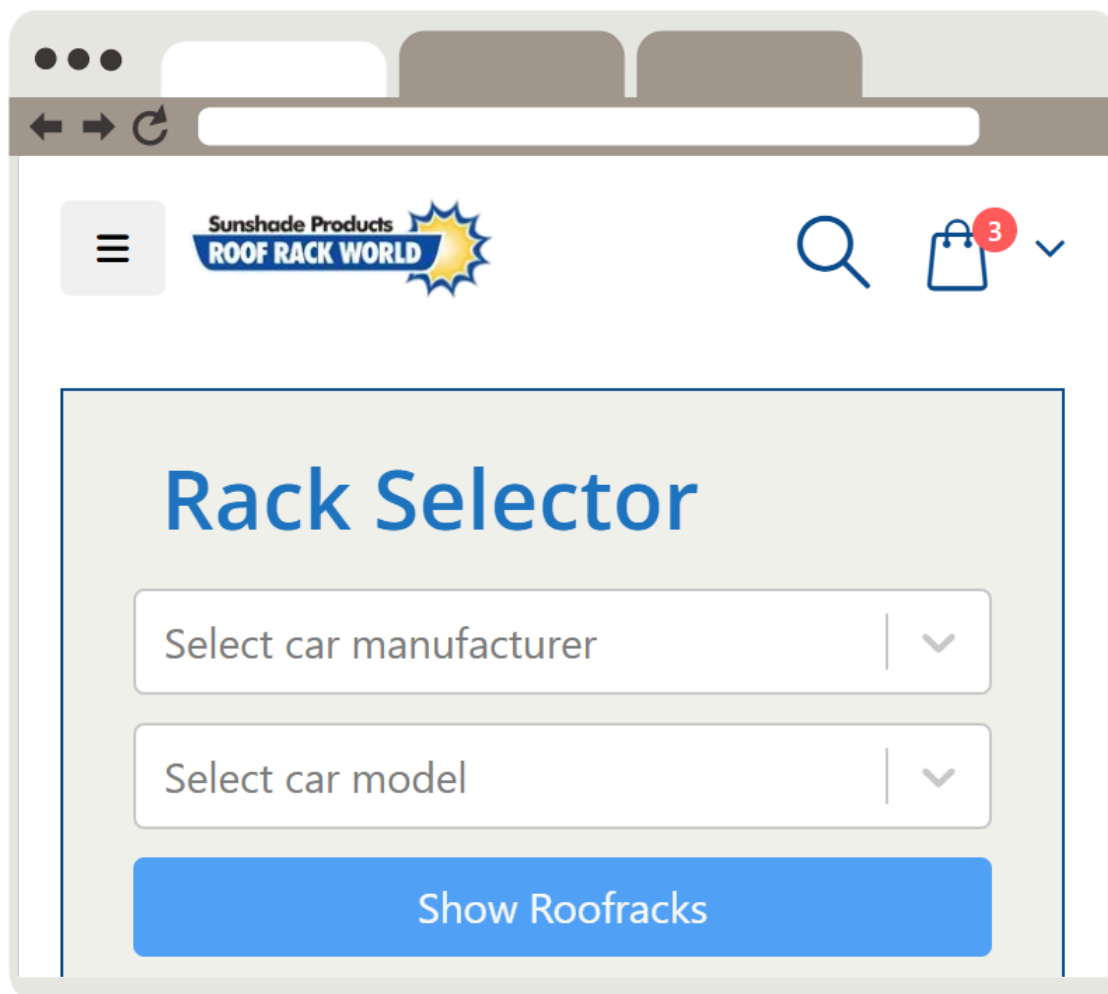


# 6 *WHAT FITS MY CAR?*

**Currently we have the largest variety of vehicles on the road than ever before.**

For each car, there are up to six major roof rack brands—each with multiple options.

We've spent years refining our website to filter out irrelevant or incompatible options. You'll only see roof racks that fit your vehicle. Just select your make and model—we'll do the rest.



The screenshot shows a web browser window with the Sunshade Products Roof Rack World website. The header includes a menu icon, the Sunshade Products logo, a search icon, and a shopping cart icon with a red badge showing '3'. The main content area features a 'Rack Selector' section with two dropdown menus: 'Select car manufacturer' and 'Select car model'. Below these is a blue button labeled 'Show Roofracks'.

**LET'S TRY**

# LET'S TALK!



Call, email or come instore to  
speak with one of our  
experienced experts!

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