

Vehicle Standards Information 34

October 2021

Guidelines for the use of bicycle carriers

This Vehicle Standards Information sheet provides guidelines for the use of bicycle carriers.

Below is guidance on what's considered to be safe use of bicycle carriers under the rules and regulations and are published guidelines for the purposes of the regulations

Requirements

General

The *Road Safety (Vehicles) Regulations 2021* require any object fitted to a vehicle be designed, built and fitted to the vehicle in a way that minimises the likelihood of injury to a person making contact with the vehicle.

Types of carriers

There are generally two types of bicycle carriers; ones that are secured to a roof rack, and those that attach to the rear of the vehicle, usually at the towbar or boot/hatch. Carriers that utilise suction cups to adhere to the roof or window are becoming more common.

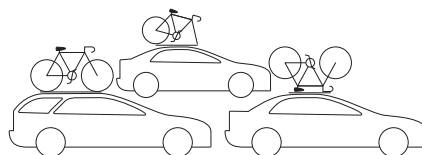
Whenever you choose a bicycle carrier, it is important to ensure that you choose one that is appropriate for your needs and suitable for your vehicle.

Regardless of the type of bicycle carrier you use, you should always follow the manufacturer's instructions when fitting, using and removing the carrier. You should also follow the

manufacturer's instructions for all other components, including towbars, couplings and securing mechanisms.

Roof-mounted

Roof-mounted bicycle carriers attach to a roof rack and generally carry the bicycle in an upright position (with or without the front wheel removed), while others carry it upside down.



Rear-mounted

Rear-mounted bicycle carriers affix to the rear of the vehicle, usually through the towbar assembly or on the boot/hatch.



Guidelines

The following guidelines apply to all bicycle carriers, regardless of their construction or location on the vehicle:

- the bicycle carrier must be securely attached to the vehicle, and checked periodically during long trips
- any bicycles must be securely attached to the bicycle carrier
- the carrier must not carry more than the number of bicycles it is designed to hold
- you must not exceed the manufacturer's maximum weight specified for any roof rack, bicycle carrier or towbar assembly

- any attachments, bicycles, and any other load, including passengers, on or in the vehicle must not cause the vehicle to exceed its gross vehicle mass (GVM)

Dimensions, protrusions and other limits

Dimensions

In addition to the above guidelines, any vehicle, including a bicycle carrier and its load, must comply with the general dimension limits set out in Part 4, Division 3 of the *Road Safety (Vehicles) Regulations 2021*.

The maximum dimensions for any vehicle, including its load, are 2.5m in width and 4.3m in height. A vehicle fitted with a bicycle carrier, along with any bicycles must not exceed these limits.

Rear-mounted bicycle carriers must also comply with rear overhang limits. Any rear overhang on a vehicle must not exceed 60% of the wheelbase or 3.7m, whichever is less. For further information about rear overhang, refer to VicRoads' publication [Rear Overhang Limits for Cars and Trucks in Victoria](#) on the VicRoads website.

Protrusions

If permanently affixed, a bicycle carrier is considered to be part of the vehicle. A bicycle carrier is considered to be a load if it is not permanently affixed and is removed when not in use. Any load, including the carrier (if not permanently affixed), as well as any bicycles or other equipment attached to the carrier must not project more than 150mm from the outermost part of either side of the vehicle.

If possible, any bicycles on rear-mounted bicycle carriers should not project more than 1.2m beyond the rear of the vehicle. If due to the design or construction of the bicycle carrier, it is not possible to stay within 1.2m, a warning signal must be carried on the outermost part of the bicycle.

A warning signal must be:

- during the day, a brightly coloured flag or piece of material, with each side at least 300mm long, and
- if driving at night, a red light that can be seen for at least 200m.

Any part of the bicycle carrier, including any bicycles which may be loaded onto it, must be fitted in a way that minimises the likelihood of injury to a person if they were to make contact with it. The following general rules apply:

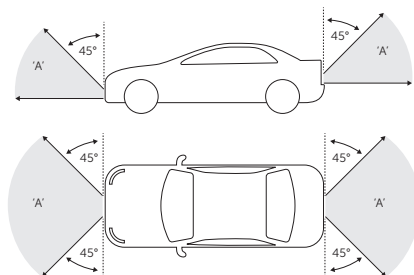
- any bicycle carrier, fittings, hooks or attachments must not have any sharp edges, corners or protrusions, nor should it extend unduly beyond the side profile of the vehicle
- all exposed sections of the bicycle carrier must be radiused and deburred
- rear and side protruding parts should be designed to minimise the risk of injury to any person who may come into contact with the carrier.

Any dangerous or sharp edges should be removed or covered.

Examples of dangerous or sharp protrusions include bolt threads, unprotected bracket mounts or bracings, and any sharp or thin pieces of metal. This may include a number plate affixed to the rear of a bicycle carrier. The number plate should be surrounded by rubber or plastic if any sharp edges present a hazard to pedestrians.

Number plates

The rear number plate on a vehicle must be clearly visible from a distance of 20m from the number plate at any point within a 90 degree horizontal arc and a vertical arc of 45 degrees as shown in the diagram below.



If a vehicle is fitted with a rear-mounted bicycle carrier and the number plate is not clearly visible in accordance with the above requirements, you may do one of the following:

- remove the vehicle's rear number plate and attach it to the bicycle carrier (you must re-affix the number plate once the carrier is removed from the vehicle), or
- order a bike rack number plate from VicRoads. For further information about bicycle racks and number plates visit the VicRoads website.

When using the bicycle carrier at night, the number plate must have sufficient lighting to ensure it remains visible in accordance with the above requirements

Lighting

The bicycle carrier or any bicycles must not obstruct or affect the performance or visibility of any tail lights, parking lights, indicators or brake lights. If any of the lights are obscured, you will need to reposition the obstruction or fit portable rear lights. Portable rear lights must have a pair of red lights visible for 200m behind the rear of the vehicle.

When driving at night, or in hazardous weather conditions causing reduced visibility, the vehicle's lights must be on and clearly visible. It is a requirement that a vehicle's tail lights are visible for a distance of 200m behind the vehicle when in use, while indicator lights must be visible from 30 metres.

If you intend to use a rear-mounted bicycle carrier at night, you must ensure that the rear lights (tail and indicator) and number plate remain clearly visible. Portable rear lights must be fitted if any of the lights are obscured.

Removing the carrier when not in use

It is advisable to remove rear-mounted bicycle carriers from the rear of the vehicle as soon as it is practical to do so after use.

For further information

Further information is available on the VicRoads website: vicroads.vic.gov.au or by calling VicRoads on **13 11 71** (TTY **13 36 77**, Speak and Listen **1300 555 727**).