

## Vehicle Standards Guide 37 (VSG-37) Components excluded from vehicle length

This guide provides information about items that are not included when measuring vehicle length.

### Why do we regulate vehicle length

The length of a vehicle is regulated to ensure that vehicles fit on roads. Limiting the length means:

- we know how much room the vehicle needs when turning, so intersections can be designed safely.
- we can design important road infrastructure to be suitable for heavy vehicles, including rest areas, turning lanes and parking bays.
- we know stacking distances at intersections, level crossings, entering premises etc.
- we know how long the combination will take to travel through an intersection, which is important for things like setting traffic light timings.
- we can determine how long it will take to overtake or pass the vehicle when driving.

### What are the length limits

The length limits for vehicles and combinations vary depending on a number of factors like vehicle type, what they carry, where they operate, what combinations they can be used in etc.

Further information will be provided to outline these limits in future vehicle standards guides.

### How is length measured

When measuring the length of a vehicle, the measurement is taken from the forwardmost point of the vehicle to the rearmost point. For trailers, the front or rear point used for length measurements may not be the front or rear end, for example some trailer length measurements are taken from the centre of the coupling or articulation point.

Everything that is affixed to or carried on the vehicle is included, but there are several items that are excluded.

The following devices are excluded when measuring length:

#### 1. Cross-view mirrors

A cross-view mirror is a mirror fitted to the front of a bonneted truck that allows the driver to see the area directly in front of the vehicle. So that they can show the driver as much of the area across the front of the vehicle, they may be fitted and adjusted to protrude out from the front of the vehicle profile.

As such, a cross-view mirror, including the arm/s that connect it to the body of the vehicle, are not included in length provided they do not increase the length of the vehicle by more than 250mm.

#### 2. ADR Indirect vision devices (ADR IVDs)

The Australian Design Rules (ADRs) allow for certain devices, such as mirrors, cameras and sensors, to be fitted to a vehicle to help the driver see the area around the vehicle. To work properly and see or sense the areas around the vehicle, they have to stick out past the body.

These devices have been designed with safety in mind, and are installed fairly high off the ground, are required to have rounded edges and many also have passed impact tests.

As such, an ADR in-direct vision device, including the arm/s that connect it to the body of the vehicle, are not included in length provided they do not increase the length of the vehicle by more than 250mm.



Image 1: Buses fitted with forward ADR IVDs (mirrors)

#### 3. Non-ADR indirect vision devices (Non-ADR IVDs)

The heavy vehicle industry is often very progressive when it comes to taking up technology that can help improve safety, and this includes taking up optional devices to help improve driver vision.

Like all indirect vision devices, to work properly and see or sense the areas around the vehicle, they protrude past the body. However, these systems are not as standardised as regulated (ADR) devices and therefore, there is an overall limit of 250mm on these devices. That is, the devices cannot increase the overall length of the vehicle by more than 250mm.

#### 4. Automated driving system devices

Vehicle manufacturers have started to develop vehicles that have increasing levels of automation. While fully automated vehicles may still be some way off, initial features that include automation will start to become more common.

Automated vehicles need to be fitted with a range of cameras and sensors to allow them to function correctly and these sensors need to protrude from the vehicle so they can see and sense everything around the vehicle. To ensure this can happen, the sensors and cameras used as part of an automated vehicle system are not included when measuring length, provided they do not increase the length by more than 250mm.

## Summary of components excluded from length

Item	Limit
Cross-view mirrors	250mm
ADR IVD (i.e. rear vision mirror, rear vision camera, Class VI mirror)	ADRs set limit for each component
Non-ADR IVS (i.e. 360° cameras)	250mm
Automated driving system devices	250mm

### For more information:

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