Section 16
Vehicle Dimensions

Objective:
To ensure that vehicles do not exceed the legislative dimension requirements as prescribed in the Heavy Vehicle (Mass, Dimension and Loading) National Regulation.

Australian Design Rules relevant to this section:
ADR 43  Vehicle configuration and dimensions

16.1 Width
Reason for rejection
a) The width exceeds 2.5 metres.

Note: This is to be measured without taking into account any of the following:
- anti-skid devices mounted on wheels
- central tyre inflation systems
- side mounted lights and reflectors
- rear vision mirrors
- signalling devices
- tyre pressure gauges
- permanently fixed webbing assembly-type devices, such as curtain side devices, if the maximum width across the vehicle and including the devices, does not exceed 2.55 metres.

16.2 Height
Reasons for rejection
a) The height of a double deck bus exceeds 4.4 metres
b) The height of a livestock carrier exceeds 4.6 metres

Note: A livestock carrier is a vehicle that operates under a Notice issued under the Heavy Vehicle National Law which allows a heavy vehicle, that is higher than 4.3 metres but not higher than 4.6 metres and is built to carry prescribed livestock, to operate.

At the time this section was published, the national notice for livestock carriers was the National Class 2 Heavy Vehicle 4.6m High Livestock Carrier Authorisation (Notice) 2014 (No. 1) available from the NHVR’s website at www.nhvr.gov.au/national-notices

c) The height of a vehicle built with at least two decks for carrying vehicles exceeds 4.6 metres
d) The height of any other vehicle exceeds 4.3 metres.
### 16.3 Length

#### Reasons for rejection

**Heavy motor vehicle**

a) The length of an articulated bus exceeds 18 metres
b) The length of a non-articulated bus exceeds 14.5 metres
c) The length of any other vehicle exceeds 12.5 metres.

**Semitrailer and dog trailers**

d) The distance from the point of articulation to the rear overhang line exceeds:
   - for a refrigerated semitrailer not used in a road train or B-double combination—9.9 metres; or
   - for another semitrailer or dog trailer—9.5 metres

e) The distance from the point of articulation to the rear of a trailer exceeds:
   - for a refrigerated semitrailer not used in a road train or B-double combination—13.6 metres; or
   - for a semitrailer not used in a road train or B-double combination—13.2 metres; or
   - for another semitrailer or dog trailer—12.3 metres

#### Figure 16.1 Semitrailer

![Semitrailer Diagram](#)

#### Figure 16.2 Refrigerated trailer

![Refrigerated Trailer Diagram](#)

f) For a semitrailer, if any part forward of the trailers front articulation point protrudes outside a 1.9 metre arc when measured from the front articulation point

g) For a dog trailer or converter dolly, the drawbar exceeds 5.0 metres from the centre of the coupling to the front articulation point.

**Note:** The front articulation point for a dog trailer is the vertical axis of rotation of the front axle group, or single axle, of the trailer.

**Pig trailers**

h) The drawbar exceeds 8.5 metres from the centre of the coupling to the rear overhang line.

**Road train trailers**

i) For a trailer used in a road train, the drawbar is not at least 3.0m long from the centre of the coupling to the front articulation point.

### 16.4 Rear overhang

‘Rear overhang’ of a vehicle, means the distance between the rear overhang line and the rear of the vehicle, inclusive of any load.

#### Rear overhang line

- For a vehicle with an axle group at the rear comprising only one axle, a line running along the centreline of the axle.
- For a vehicle with an axle group at the rear comprising two axles, one of which is fitted with twice the number of tyres as the other, a line running parallel to the axles that is:
  - closer to the axle carrying the greater number of tyres than it is to the other axle; and
  - located at one-third of the distance between the two axles.
- For a vehicle with any other axle group at the rear, a line running along the centre of the axle group.

**Note:** If an axle or axle group includes at least one steerable axle, steerable axles are to be disregarded except when all the axles are steerable.

#### Reasons for rejection

**Heavy motor vehicle**

a) The rear overhang exceeds either 60% of the distance from the front axle to the rear overhang line or 3.7 metres, whichever is the lesser.
a) The rear overhang exceeds either 60% of the distance from the front articulation point to the rear overhang line or 3.7 metres, whichever is the lesser.

Figure 16.3 Rigid truck

Dog trailer

a) The rear overhang exceeds either 60% of the distance from the front articulation point to the rear overhang line or 3.7 metres, whichever is the lesser.

Figure 16.4 Dog trailer

Pig trailer

a) The rear overhang exceeds either the distance between the front of the trailers body or load carrying area and rear overhang line or 3.7 metres, whichever is the lesser.

Figure 16.5 Pig trailer

Semitrailer

Each axle fitted with the same number of tyres

Wheelbase

Rear overhang

12.3 m

Figure 16.6 Semitrailer

Each axle fitted with the same number of tyres

“S dimension”

Rear overhang

12.3 m

Load-carrying area, forward of the rear overhang line.

Rear overhang 3.7m maximum