



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.

✎ 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
- mirrors
- blind spot vision devices (provided ADR 14/02 compliant or at least 2m above the ground and used to monitor the area adjacent to the vehicle)
- 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 any of the following types of trailer exceeds 4.6 metres:
- a livestock carrier
 - a vehicle built with at least two decks for carrying vehicles
 - a specified semitrailer

✎ 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.

A specified semitrailer is a trailer with a maximum deck height of 1.2m (for at least half of the overall deck length), air suspension and is not a PBS trailer.

- 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.

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16.3. Length

Reasons for rejection

Heavy motor vehicle

✚ This is to be measured without taking into account any blind spot vision devices provided:

- they meet ADR 14/02; or
 - project less than 150mm forward of the cabin; and
 - are at least 2m above the ground; and
 - monitor the area adjacent to the 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

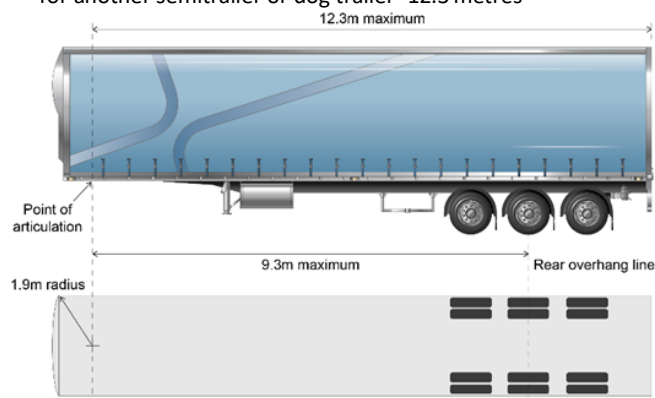


Figure 16.2 Refrigerated trailer



Figure 16.1 Semitrailer

- f. For a semitrailer, if any part forward of the trailer's 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.

✚ 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

- a. For a vehicle with an axle group at the rear comprising only one axle, a line running along the centreline of the axle.
- b. 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.
- c. For a vehicle with any other axle group at the rear, a line running along the centre of the axle group.

✚ 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

- d. 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.

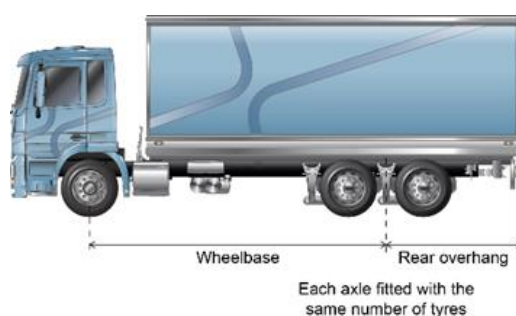


Figure 16.3 Rigid truck

Dog trailer

- e. 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.

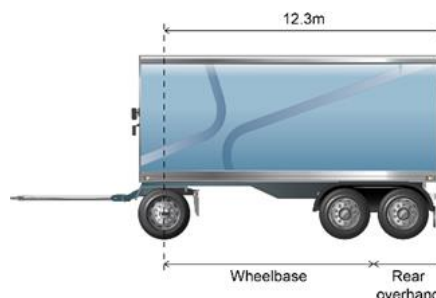


Figure 16.4 Dog trailer

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Pig trailer

- f. 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.

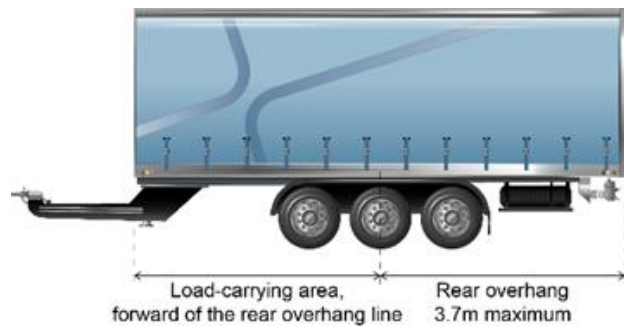


Figure 16.5 Pig trailer

Semitrailer

- g. 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.

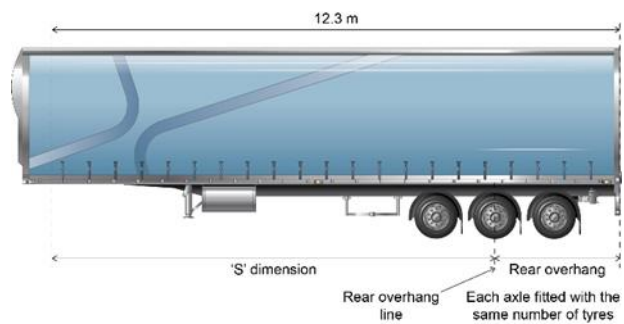


Figure 16.6 Semitrailer

