

Correct as at 17th May 2026. It may be superseded at any time.

Extract taken from: In-service certification (WoF and CoF) > Unclassified vehicles > Vehicle exterior

## 2 Vehicle exterior

### 2-1 External projections

#### Reasons for rejection

##### Condition and performance

1. The risk of a component (Note 1) hooking a vehicle, or hooking or grazing a person, has not been minimised.
2. An ornamental object or fitting (Note 2) protrudes in such a way that it is likely to injure a person.
3. A protruding object or fitting that has a functional purpose (Note 3) is fitted in a way that does not reduce the risk of injury to a person.
4. A component, object or fitting is not securely attached to the vehicle.
5. A protruding object or fitting adversely affects the driver's vision or control.

##### Note 1

Components include damaged, corroded and exposed body panels.

##### Note 2

**Ornamental object or fitting** means an object or fitting that does not have a practical purpose, for example bonnet emblems. The external projections requirements relate to the design and maintenance of objects and fittings that protrude from the exterior of the motor vehicle with regard to the safety of other motor vehicles, pedestrians and cyclists.

##### Note 3

**Functional object or fitting** means an object or fitting that has a practical purpose.

## Summary of legislation

#### Applicable legislation

- [Land Transport Rule: External Projections 2001](#).

## Permitted equipment

1. A vehicle may be fitted with a protruding ornamental or functional object or fitting.

## Condition and performance

2. A protruding ornamental object or fitting (Note 2) must not be likely to injure a person.

3. A protruding object or fitting that has a functional purpose (Note 3) must be installed so that the risk of the object or fitting causing injury to a person is minimised.

4. Components of a vehicle, including damaged or corroded body panels, must be such that the risk of their hooking a vehicle, or hooking or grazing a person, is minimised.

5. A protruding object or fitting must not adversely affect driver vision or driver control.

## 2-2 Dimensions

The vehicle inspector need only inspect dimensions in detail if there is doubt about the vehicle's compliance.

## Reasons for rejection

### Mandatory equipment

1. A rigid vehicle or trailer (Note 1) exceeds the dimension requirements set out in Table 2-2-1 and is not fitted with the appropriate hazard warning equipment set out in Table 2-2-2.

2. A required revolving amber beacon cannot be activated and deactivated.

### Note 1

**Rigid vehicle** means a vehicle with motive power, driver's position and steering system, that does not have any pivot points to allow any part of the chassis of the vehicle to move or rotate in relation to any other part of the chassis of the vehicle; includes a pivot steer vehicle.

### Note 2

**Front axis** means:

- a) the centre point of the front axle set of a trailer that has two axle sets and is steered by the front axle set, or
- b) the centre of the foremost axle of a rigid vehicle with motive power.

**Rear axis:**

- a) in relation to a vehicle with only one non-steering axle, means that axle
- b) in relation to a vehicle with a non-steering axle set of two axles, means
  - i. midway between those axles, if each axle has an equal number of tyres on it
  - ii. two-thirds of the distance from the lesser-tyred axle towards the greater-tyred axle, if one axle has twice as many tyres on it as the other axle

c) in relation to a vehicle with a non-steering tri-axle set or a non-steering quad-axle set, or an overdimension vehicle with more than three axles, means midway between the extreme axles of the set

d) except as specified in (e) below, in relation to a vehicle whose rear axle set includes one or more steerable axles in conjunction with one or more non-steering axles, means midway between the extreme non-steering axles of the set

e) in relation to a semi-trailer with two non-steering axles at the front and two steering axles at the rear, means the centre line of the second non-steering axle

f) in relation to a vehicle whose rear axle set includes one or more retracted axles in conjunction with one or more non-retracted axles, means midway between the extreme non-retracted axles of the set

g) in relation to a vehicle that does not have an axle arrangement that is in paragraphs (a) to (f), means a position determined by the NZTA.

**Pivot steer vehicle** means a vehicle with a chassis that is split into two dependent parts that are connected by a permanent steering pivot.

**Wheelbase** means the distance from a vehicle's rear axis to its front axis.

### **Note 3**

**Full trailer** means a trailer with two axle sets, the foremost of which is steered by a drawbar; includes a semi-trailer with non-steering axles coupled to a converter dolly.

### **Note 5**

**Semi-trailer** means a trailer with only one axle set where the point of attachment to the towing vehicle or leading trailer:

a) is no further rearward than the rearmost axle of the towing vehicle or rearmost axle of the leading trailer, or

b) if the towing vehicle is a rigid vehicle and has more than one axle in its rear axle set, is no more than 300mm rearward of the rear axis of the towing vehicle.

**Table 2-2-1. Dimension requirements (see Figure 2-2-4, Figure 2-2-5, Figure 2-2-6)**

| Dimension      | Maximum distance   | Comments   |
|----------------|--|--|
| Width          | <p><b>2.55m</b></p> <p><b>1.275m</b> from each side of the longitudinal centreline of the vehicle</p>  | <p>Measurement does not include:</p> <ul style="list-style-type: none"> <li>• collapsible mirrors which extend no more than 240mm from the <b>side and 1.49m</b> when measured from the <b>vehicle's longitudinal centre line</b></li> <li>• direction indicators and side-marker lamps</li> <li>• cab exterior grab rails that extend no more than <b>1.325m</b> when measured <b>from a vehicle's longitudinal centre-line</b></li> <li>• the bulge towards the bottom of a tyre</li> <li>• <b>cameras or close-proximity monitoring systems mounted on the side exterior of a vehicle that extends not more than 70mm from the side wall of the vehicle</b></li> <li>• <b>devices for improving the aerodynamic performance of a vehicle that extend not more than 25mm from either side of a vehicle.</b></li> </ul> |
| Overall length | <p>Rigid vehicle without tow coupling: 12.6m</p> <p>Rigid vehicle with tow coupling, full trailer: 11.5m</p> <p>Towing vehicle and semi-trailer combination: 19m</p> <p><b>(Note: A semi-trailer with a quad-axle set that was first registered before 1 February 2017 may have two steering axles if the overall length of the towing vehicles and its trailer does not exceed 18m)</b></p> <p>Towing vehicle and simple trailer: 22m</p> <p>Any other vehicle combination: 20m</p> | <p>Measurement does not include collapsible mirrors.</p>   |
| Height         | <p><b>4.3m</b></p>   |  |

| Dimension        | Maximum distance  | Comments   |
|------------------|---|--|
| Forward distance | Any trailer (other than a simple trailer): 8.5m<br>Semi-trailer: 9.2m<br>Rigid vehicle with tow coupling: 8.5m<br>Rigid vehicle without tow coupling: 9.5m  | Forward distance is measured as follows: <ul style="list-style-type: none"> <li>• rigid vehicle: from the rear axis (Note 2) to the front of the vehicle (not including collapsible mirrors)</li> <li>• full trailer: from the rear axis (Note 2) to the front of the trailer (excluding the drawbar and front axle set with its associated carriage)</li> <li>• simple trailer: from the rear axis (Note 2) to the centre of the tow coupling</li> <li>• semi-trailer: from the rear axis (Note 2) to the centre of the kingpin.</li> </ul> |
| Rear overhang    | Vehicle with GVM 3500kg or less: <ul style="list-style-type: none"> <li>• 4m</li> </ul> Vehicle with GVM greater than 3500 kg: <ul style="list-style-type: none"> <li>• rigid vehicle with rearmost axle being a non-steering axle: 4m or 70% of wheelbase (whichever is less)</li> <li>• rigid vehicle with rearmost axle being a steering axle: 4.25m or 70% of wheelbase (whichever is less)</li> <li>• simple trailer: 4.0m or 50% of forward distance (whichever is less)</li> <li>• semi-trailer: 4.3m or 50% of forward distance (whichever is less)</li> <li>• full trailer: 4m or 50% of wheelbase (whichever is less)</li> <li>• Vehicle first registered anywhere before 1 December 1989: 4m.</li> </ul> | <ul style="list-style-type: none"> <li>• Rear overhang is measured from the rear axis (Note 2) to the rear of the vehicle.</li> </ul>  |
| Front overhang   | Rigid vehicle: 3m<br>Simple trailer: 2.04m radius arc ahead of tow coupling centre<br>Full trailer: 2.04m radius arc ahead of turntable centre<br>Semi-trailer: 2.04m radius arc ahead of kingpin centre  | Front overhang is measured as follows: <ul style="list-style-type: none"> <li>• rigid vehicle: from the front edge of the driver's seat in the rearmost position to the front of the vehicle</li> <li>• semi-trailer: from the centre of the kingpin to the front of the trailer</li> <li>• full trailer: from the centre of the turntable to the front of the trailer (excluding the drawbar)</li> <li>• simple trailer: from the centre of the tow coupling to ahead of the trailer.</li> </ul>  |

**Table 2-2-2. Hazard warning equipment requirements for vehicles that exceed the dimensions in Table 2-2-1**

| Vehicle category<br>(see Figure 2-2-4) | Dimension              | Limits<br>(up to and including)                        | Required hazard warning equipment  |
|--|------------------------|--|--|
| Category 1                             | Width/forward distance | 2.55m /11.4m,<br>or<br>3.1m/10.5m, or<br>3.7m/8.5m, or | 1. Flags <sup>1</sup> or panels <sup>2</sup> fitted on each side at the front and rear as close as practical to the outside edge<br><br>2. OVERSIZE sign <sup>3</sup> if width exceeds 3.1m and vehicle is piloted.  |
|  | Length                 | 25m, or  |  |
|  | Front overhang         | 7m, or   |  |
|  | Rear overhang          | 7m   |  |
| Category 2 (not including category 1)  | Width/forward distance | 2.55m /13.3m,<br>or<br>4.5m/8.5m, or                   | 1. Panels <sup>2</sup> fitted on each side at the front and rear as close as practical to the outside edge<br><br>2. OVERSIZE sign <sup>3</sup> fitted at the front and rear if more than 3.1m wide<br><br>3. Revolving amber beacon fitted so that it is visible to approaching traffic if the vehicle is more than 3.7m wide |
|  | Length                 | 35m, or  |  |
|  | Front overhang         | 10m, or  |  |
|  | Rear overhang          | 10m  |  |
| Category 3 (not including category 2)  | Width/forward distance | 2.55m /20m<br>5m/20m<br>5m/8.5m                        | 1. Panels <sup>2</sup> fitted on each side at the front and rear as close as practical to the outside edge<br><br>2. OVERSIZE sign <sup>3</sup> fitted at the front and rear<br><br>3. Revolving amber beacon fitted so that it is visible to approaching traffic if the vehicle is more than 3.7m wide                        |
|  | Front overhang         | 10m, or  |  |
|  | Rear overhang          | 10m  |  |

| Vehicle category<br>(see Figure 2-2-4) | Dimension                          | Limits<br>(up to and including) | Required hazard warning equipment   |
|--|------------------------------------|---------------------------------|---|
| Category 4A (not including category 3) | Width/forward distance             | 11m/20m<br>11m/8.5m             | 1. Panels <sup>2</sup> fitted on each side at the front and rear as close as practical to the outside edge<br>2. OVERSIZE sign <sup>3</sup> fitted at the front and rear<br>3. Revolving amber beacon fitted so that it is visible to approaching traffic if the vehicle is more than 3.7m wide |
|  | Front overhang                     | 10m, or                         |   |
|  | Rear overhang                      | 10m                             |   |
| Category 4B                            | Exceeding any limit in Category 4A |                                 | 1. Panels <sup>2</sup> fitted on each side at the front and rear as close as practical to the outside edge<br>2. OVERSIZE sign <sup>3</sup> fitted at the front and rear<br>3. Revolving amber beacon fitted so that it is visible to approaching traffic if the vehicle is more than 3.7m wide |

<sup>1</sup> Flags:

- must be fluorescent yellow
- must be at least 400mm long x 300mm wide.

<sup>2</sup> Hazard warning panels:

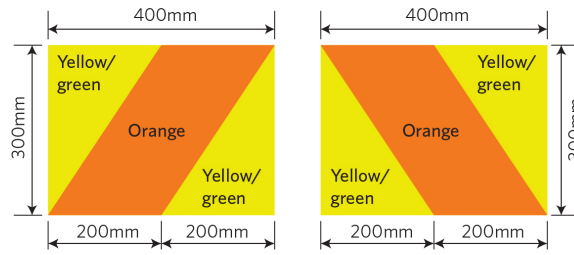
- must be reflective yellow-green with a reflective orange diagonal stripe
- comply with AS/NZS 1906.1:2007
- be frangible for those portions which extend beyond the vehicle's limits (frangible means breakable or readily deformable)
- must be of at least the minimum dimensions and the colours specified in Figure 2-2-2.

<sup>3</sup> OVERSIZE sign:

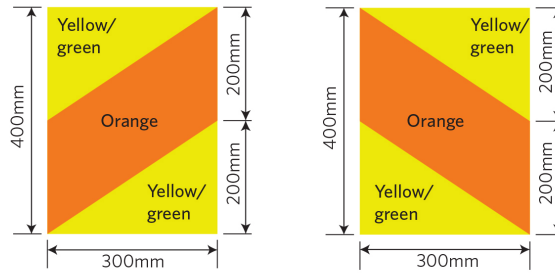
- must be black lettering on a yellow-green background
- must be at least 300mm x 1100mm in size
- be frangible if any part of the sign extends beyond the body or load of the vehicle, whichever it is attached to (frangible means breakable or readily deformable)
- may be in two parts: OVER and SIZE.

**Figure 2-2-1. Hazard panel details**

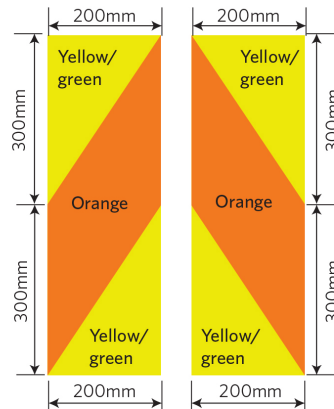
Display these panels



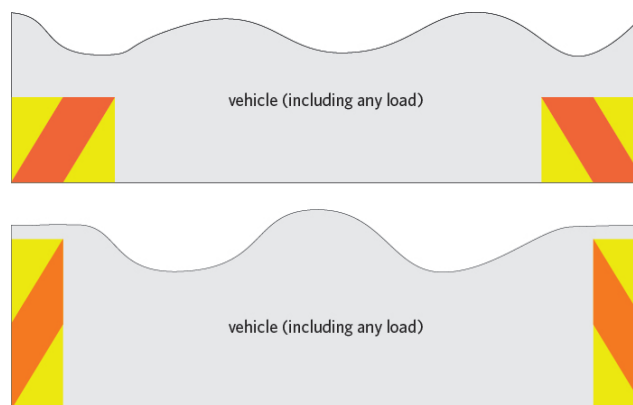
or these panels



or these panels

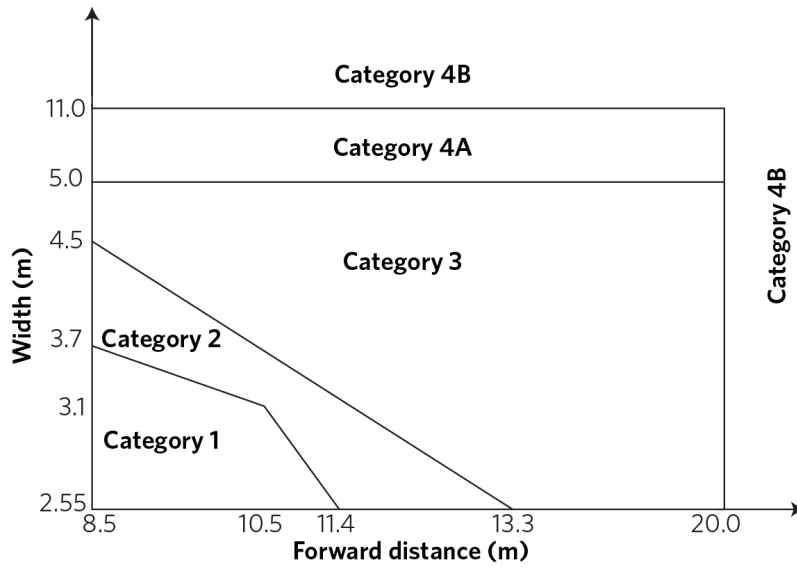


**Figure 2-2-2. Hazard panel location and orientation**



**Figure 2-2-3. Overdimension vehicle categories for width/forward distance thresholds**

Use this figure to determine vehicle category in Table 2-2-2.



For the purposes of this figure, vehicles with a width less than 2.55m are deemed to have a width of 2.55m and vehicles with a forward distance of less than 8.5m are deemed to have a forward distance of 8.5m.

**Figure 2-2-4. Trailer dimensions**

(Note: Dimensions in red updated in VDAM 2016)

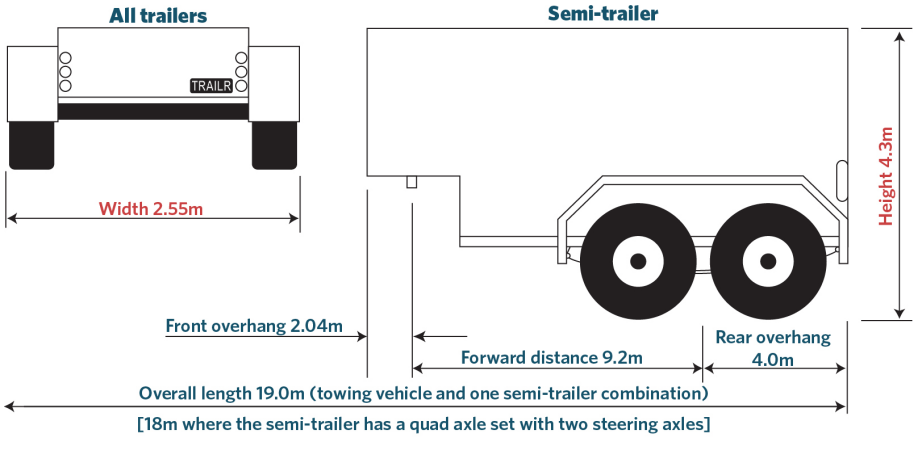
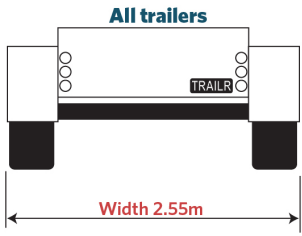
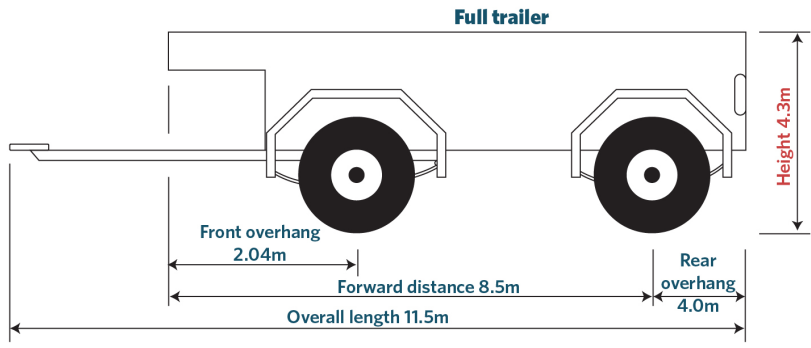
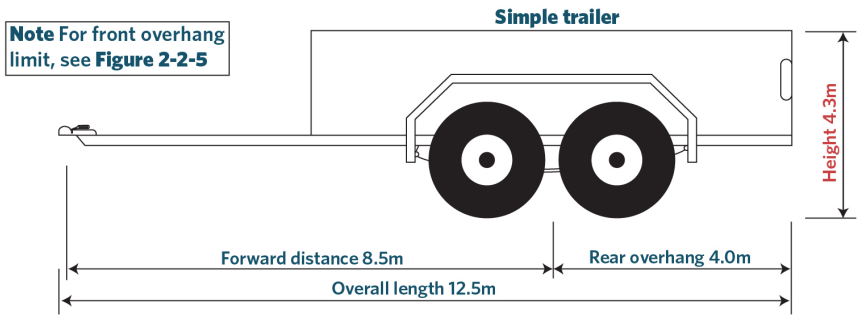
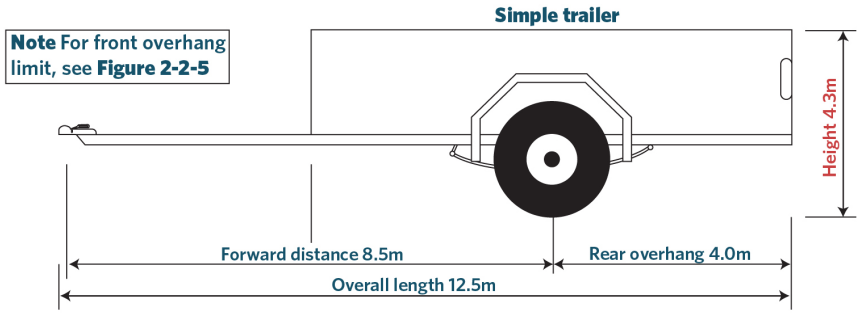


Figure 2-2-5. Measurement of front overhang

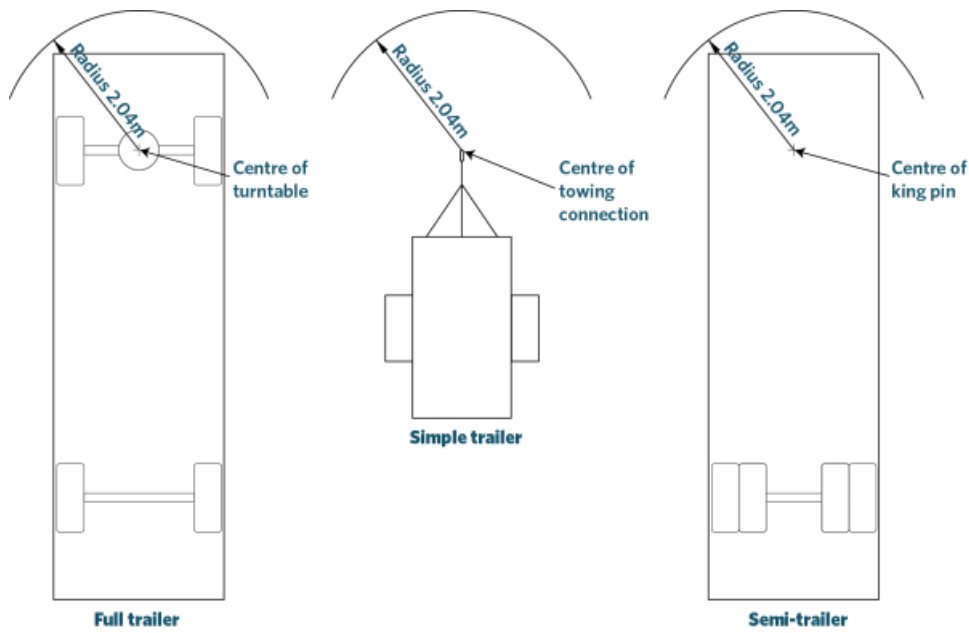
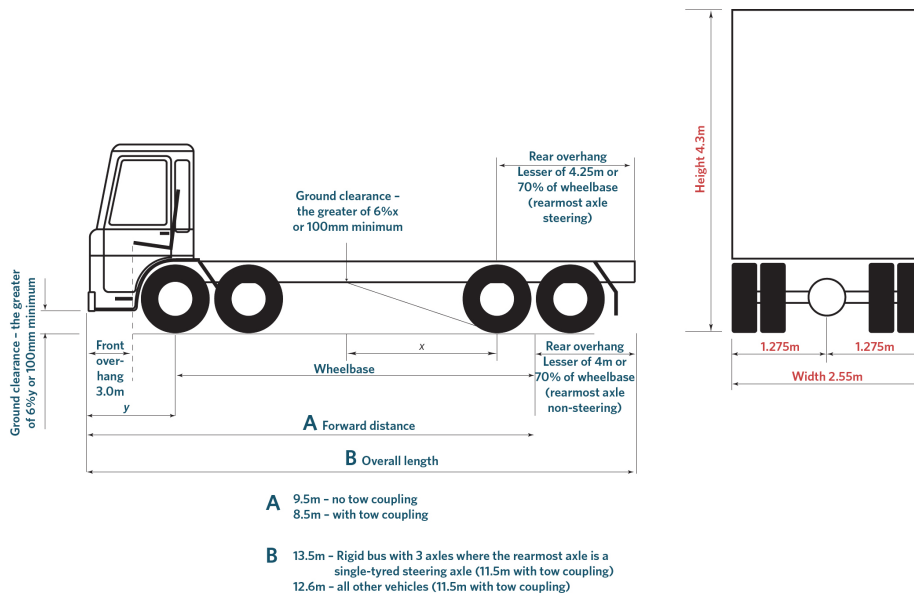


Figure 2-2-6. Dimensions for rigid heavy vehicles

(Note: Dimensions in red updated in VDAM 2016)



## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Vehicle Dimensions and Mass 2016.](#)

### Mandatory equipment

1. A rigid vehicle or trailer (Note 1) that exceeds the dimensions in Table 2-2-1 must be fitted with additional equipment set out in Table 2-2-2.

