Correct as at 27th June 2026. It may be superseded at any time.

Extract taken from: Heavy vehicle specialist certification > Vehicle dynamic performance > Dynamic performance

7-5 Dynamic performance

Certifier category: **HVP2**

Reasons for rejection

1. A high productivity vehicle that is not a pro forma vehicle is not certified to the requirements of the Rule.

2. A pro forma vehicle has not been approved as a high productivity vehicle.

3. A high productivity vehicle has been certified by a HVS certifier with the incorrect category.

4. A high productivity vehicle has not been certified using the appropriate methodology (PBS or approved alternative) (Note 1).

5. A vehicle certified as a pro forma high productivity heavy vehicle does not have general access to the road network over 44 tonne.

6. A vehicle certified as a high productivity heavy vehicle but is not a pro forma or PBS vehicle has general access to the road network.

7. A vehicle certified as a high productivity does not have the equivalent safety performance as a standard motor vehicle for the proposed roads to be used under the permit.

8. A vehicle certified as a high productivity vehicle does not meet the applicable axle and axle set requirements and the gross mass limits in parts 3 and 4 of *Schedule 3*.

9. the towing vehicle in a combination certified as a high productivity vehicle does not have at least two motor driven axles in a tandem or tri axle set when operating above 39 tonne.

10. A semi-trailer certified as a high productivity vehicle that is not in a B-train does not have a tri-axle or quad-axle set with no more than one steering axle when operating above 44 tonne.

11. A semi-trailer certified as a high productivity vehicle that is in a B-train and does not have either a tandem or tri-axle set when operating above 44 tonne when operating above 44 tonne.

12. A full trailer that is certified as part of a high productivity combination does not have either two tandem axle sets or one tandem axle set and one tri-axle set.

13. A vehicle operating as a high-productivity motor vehicle has a gross mass which exceeds the gross vehicle mass, gross combination mass, maximum towed mass, or brake code mass if any of these limits apply to the vehicle.

14. A vehicle certified as a high productivity vehicle has been certified with a gross mass, axle mass, or dimension requirements less than that specified in the permit or the applicable requirements in the Rule.

15. A vehicle being operated as part of a combination vehicle on a 50Max permit does not have sufficient axles to ensure the dedicated combination it operates in has a minimum of 9 axles.

16. A vehicle operating as a high productivity vehicle operates outside the width or height dimension limits and does not have an exemption.

17. A vehicle operating as a high-productivity motor vehicle does not comply with the requirements of the Rule.

Note 1

For further information:

- **Vehicle dimension and mass permitting manual** (NZTA website)
- **HPMV permit questions and answers** (NZTA website)

Table 7-5-1. Dimension requirements[1] for vehicles and vehicle combinations

Dimension	Distance (metres except where indicated otherwise)
Width[2]	
Two-wheeled vehicles of classes AA, AB, LA, and LC	1.1
All other vehicles	2.55, or 1.275 from each side of the longitudinal centre-line of the vehicle
Overall length (excluding collapsible mirrors)	
Towing vehicle, full trailer, pole trailer (excluding load)	11.5
Simple trailer	12.5
Rigid vehicle (not towing)	12.6
Rigid bus with three axles where the rearmost axle is a single-tyred steering axle that is: (a) either positively and continuously linked to the front steer axle (except may be locked for reverse or high-speed operations), or (b) automatically locked at a speed of 30km/h in the straight-ahead position or for reverse operations	13.5
Articulated bus	18
Towing vehicle and semi-trailer with: • a quad-axle set with two steering axles (and first registered before 1/2/17) • any other axle set	 18 19
Towing vehicle and full trailer: • excluding load • including load if load overhanging the rear of the trailer does not exceed 2.3m in width, or 1.15m from the longitudinal centre-line of the vehicle	 20 22

Dimension	Distance (metres except where indicated otherwise)
Towing vehicle and simple trailer	22
Any other combination of vehicles	20
Height[3]	
All vehicles	4.3
Forward distance (excluding collapsible mirrors)	
Rigid vehicle	8.5 if fitted with tow coupling; 9.5 otherwise
Full trailer, simple trailer, pole trailer with drawbar at full extension, articulated bus (both front and rear sections)	8.5
Semi-trailer	9.2
Rear overhang	
Heavy rigid vehicle whose rearmost axle is a non-steering axle	4.0 or 70% of wheelbase (whichever is less)
Heavy rigid vehicle whose rearmost axle is a steering axle	4.25 or 70% of wheelbase (whichever is less)
Rigid bus that exceeds 12.6m in overall length	4.5 or 72% of wheelbase (whichever is less)
Articulated bus, heavy simple trailer, heavy pole trailer with one axle set	4.0 or 50% of forward distance (whichever is less)
Heavy semi-trailer other than a Class TC caravan trailer	4.3 or 50% of forward distance (whichever is less)
Heavy full trailer, heavy pole trailer with two axle sets	4.0 or 50% of wheelbase (whichever is less)
Class TC caravan trailer that is a semi-trailer	4.0 or 65% of forward distance (whichever is less)
All other vehicles	4.0
Minimum ground clearance[4]	

Dimension	Distance (metres except where indicated otherwise)
Heavy motor vehicle	The greater of 100mm or 6% of the distance from the nearest axle to the point where the ground clearance is measured (except when vehicle is loading or unloading)
Light motor vehicle	No requirement
Front overhang	
Semi-trailer	2.04 radius arc ahead of kingpin centre
Simple trailer	2.04 radius arc ahead of tow coupling centre
Full trailer	2.04 radius arc ahead of turntable centre
Pole trailer	2.04 radius arc ahead of turntable centre on towing vehicle
Agricultural motor vehicle	4.0
All other vehicles	3.0
Rear trailing unit distance	
A-train, B-train, towing vehicle and two trailers	14.5
Articulated vehicle point of attachment (excluding articulated buses)	No further rearward than the rearmost axle of the towing vehicle or rearmost axle of the leading trailer, and if the towing vehicle is a rigid vehicle and has more than one axle in its rear set, not more than 300 mm rearward of the rear axis of the towing vehicle
Tow coupling position[5] (for towing heavy trailer)	
Full trailer	45% of wheelbase of towing vehicle
Simple trailer	At least 700 mm rearward of the rear axis of the towing vehicle and not more than a distance equal to 50% of wheelbase

Dimension	Distance (metres except where indicated otherwise)
Articulated bus	45% of wheelbase of the leading unit
Coupling point distance[6]	
A-train	30% of forward distance of semi-trailer
Inter-vehicle spacing (between any two consecutive vehicles in a combination, except for a laden pole trailer)[7]	4.0
Outside turning circle in either direction for 360-degree turn[8]	25.0 diameter (kerb to kerb, excluding collapsible mirrors)

Notes:

1 Unless otherwise stated, the dimensions in Table 7-5-1 are maximum dimensions.

2 For items not included in determining whether a vehicle complies with width restriction, see section 3.4 *(***Land Transport Rule: Vehicle Dimensions and Mass 2016**).

3 For items not included in determining whether a vehicle complies with height restrictions, see section 3.6 *(***Land Transport Rule: Vehicle Dimensions and Mass 2016**).

4 Ground clearance for a heavy motor vehicle does not include flexible mudflaps, wheels, tyres or devices designed to discharge static electricity.

5 The tow coupling position is the distance rearward from the motor vehicle's rear axis to the centre of the tow coupling.

6 The coupling point distance (for an A-train) is the distance between the rear axis of the semi-trailer and the tow coupling centre of the full trailer.

7 For other requirements relating to the inter-vehicle spacing between a towing vehicle and a full trailer, see section 3.14(1) *(***Land Transport Rule: Vehicle Dimensions and Mass 2016**).

8 Includes all attachments to vehicles except collapsible mirrors. For requirements relating to turning circle, see section 3.7(1) and 3.7(2) *(***Land Transport Rule: Vehicle Dimensions and Mass 2016**).

Summary of legislation

High productivity vehicles (PBS or Pro-forma) may only be certified by a certifier with this category or by application to the Transport Agency. The Transport Agency reserves the right to set conditions.

Applicable legislation

- **Land Transport Rule: Vehicle Dimensions and Mass 2016**

Page amended **1 February 2017** (see **amendment details**).