

Correct as at 23rd November 2013. It may be superseded at any time.

Extract taken from: NZTA Vehicle Portal > VIRMs > In-service certification (WoF) > General vehicles > Vehicle exterior

2 Vehicle exterior

2-1 External projections

Reasons for rejection

Condition and performance

1. The risk of a component ([Note 5](#)) hooking a vehicle, or hooking or grazing a person, has not been minimised, eg a bonnet or bumper has been removed, exposing sharp, moving or hot components.
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 not installed so that the risk of causing injury to a person is minimised, eg the object or fitting:
 - a) is of excessively heavy construction for the purpose for which it has been fitted, or
 - b) has sharp corners, or
 - c) slopes forward, unless this is necessary to fit the contours of the vehicle, or
 - d) has an unnecessarily wide gap between the object or fitting and the front of the vehicle, or
 - e) exceeds the vehicle's width by more than 100mm on either side, other than side mounted glass sheet transport racks and collapsible side mirrors, or
 - f) is a glass sheet transport rack that is not fitted with a front flaring to minimise the risk of injury to a person.
4. A protruding 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.

Modifications

6. A modification ([Note 4](#)) affects an external projection – including a protruding object or fitting that has a functional purpose and affects the driver's vision or control of the vehicle, and
 - a) is not excluded from the requirements for LVV specialist certification ([Table 2-1-1](#)), and
 - b) is missing proof of LVV specialist certification, ie:
 - i. the vehicle is not fitted with a valid LVV vehicle certification plate, or
 - ii. the operator is not able to produce a valid modification declaration or authority card.

Note 1

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. The attachment of such objects and fittings to the vehicle is addressed in the [Vehicle structure](#) section of this manual.

Note 2

Ornamental object or fitting means an object or fitting that does not have a practical purpose, eg bonnet emblems.

Note 3

Functional object or fitting means an object or fitting that has a practical purpose, eg panniers, pack racks, spare wheel carriers, and so on.

Note 4

Modify means to change a vehicle from its original state by altering, substituting, adding or removing any structure, system, component or equipment, but does not include repair.

Repair means to restore a damaged or worn vehicle, its structure, systems, components or equipment to within safe tolerance of its condition when manufactured, including replacement with equivalent undamaged or new structures, systems, components or equipment.

Note 5

Components include damaged, corroded and exposed body panels.

Note 6

The following vehicles with a GVM of 2500kg or less must comply with a frontal impact occupant protection standard:

- Class MA motor vehicles manufactured on or after 1 March 1999
- Class MA motor vehicles that were less than 20 years old when they were first registered in New Zealand on or after 1 April 2002
- Class MB and MC motor vehicles manufactured on or after 1 October 2003.

Table 2-1-1. Modifications that do not require LVV certification

Fitting of or modification to:	LVV certification is not required provided that:
Cosmetic body kits and components (including utility canopies and plastic bumper skins)	<ul style="list-style-type: none"> • the fitting system does not weaken the vehicle structure, and • no frontal impact components have been removed where the vehicle is required to comply with a frontal impact occupant protection standard (Note 6) • the kit or components do not present any forward-facing external projections, and • the performance of any lamps are not affected as a result of the kit or components.
Auxiliary winches	<ul style="list-style-type: none"> • the winch either: <ul style="list-style-type: none"> – does not protrude forward of the front face of the bumper, or – does project forward of the bumper line, but is fitted with ‘pedestrian-friendly’ shrouds to reduce trapping risk and present a larger forward-facing surface area.
Side racks (for glass or other sheet materials)	<ul style="list-style-type: none"> • there is no doubt as to the rack’s load carrying capacity, and • no forward-facing pedestrian traps exist, and • the rack is designed and protected so that sharp or dangerous cargo cannot face directly forward projecting beyond the outside of the body.
Bumper bar (removal and change) (Note 1)	<ul style="list-style-type: none"> • the vehicle is not required to comply with a frontal impact occupant protection standard (Note 6)
Auxiliary bars (including bull bars, nudge bars, external roll cages and A-frames [or similar])	<ul style="list-style-type: none"> • the vehicle is not required to comply with a frontal impact occupant protection standard (Note 6), or • the vehicle is required to comply with a frontal impact occupant protection standard and the auxiliary bar: <ul style="list-style-type: none"> – is a vehicle manufacturer supplied component for that vehicle, or – has been certified by the auxiliary bar manufacturer as frontal impact compliant (as may be indicated by a label), or - is an A-frame that meets all of the following requirements: <ul style="list-style-type: none"> - is attached to the chassis by means other than welding, and - components are fit for purpose, and - the brackets remaining on the vehicle when the A-frame is removed are recessed behind the forward surface of the bumper by no less than 20mm, and - the brackets are fitted so that they do not bridge the vehicle’s crumple zones or significantly stiffen the front of the vehicle. <p>Note that an auxiliary bar that does not meet the above minimum requirements is unlikely to meet LVV requirements and so cannot be certified.</p>

Fitting of or modification to:	LVV certification is never required:
Aerials	<ul style="list-style-type: none"> in-service requirements for conditions and performance must be met.
Engine hood emblems	
Engine hood pins	
Towbars	
Trunk racks	
Roof-mounted wheelchair winch	
Roofracks on a vehicle other than a PSV. (Refer to section 3-3 for PSV requirements.)	
Additional or substituted rear-view mirrors	
Any modification for the purposes of law enforcement or the provision of emergency services	

Summary of legislation

Applicable legislation

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

Permitted equipment

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

Condition and performance

- A protruding ornamental object or fitting must not be likely to injure a person.
- A protruding object or fitting that has a functional purpose must be installed so that the risk of the object or fitting causing injury to a person is minimised.
- Components of a motor 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.
- A protruding object or fitting must not adversely affect driver vision or driver control.

Modifications

6. A modification that affects an external projection must be inspected and certified by an LVV specialist certifier, unless the vehicle:

- is excluded from the requirement for LVV specialist certification (**Table 2-1-1**), and
- has been inspected in accordance with the requirements in this manual, including those for equipment, condition and performance.

Page amended **14 October 2013** (see [amendment details](#)).

2-2 Dimensions

Reasons for rejection

Mandatory equipment

- A rigid vehicle ([Note 1](#)) with a GVM of 3500kg or less exceeds the dimension requirements set out in **Table 2-2-1** and is not:
 - a specialist overdimension vehicle ([Note 3](#)), or

b) a vehicle designed primarily to transport an overdimension load, or

c) a vehicle operating on a valid permit, exemption or approval.

2. A rigid vehicle that exceeds the dimensions set out in **Table 2-2-1** is not fitted with the appropriate hazard warning equipment set out in **Table 2-2-2**.

3. A required revolving beacon cannot be activated and deactivated.

Note 1

A **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 vehicle chassis to move or rotate in relation to any other part of the vehicle chassis, but includes a pivot steer vehicle.

Note 2

The **rear axis of a vehicle** means:

- if the vehicle is fitted with one rear axle: the centre of that axle
- if the vehicle is fitted with a set of two axles: midway between those two axles if each axle has an equal number of tyres on it, or 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.

Note 3

Specialist overdimension vehicle means a vehicle of which the primary purpose is to carry out a specialist function that requires overdimension equipment, and the dismantling of the equipment would make it unusable for its intended purpose, or it would take more than four hours to dismantle the equipment. Additional operational requirements may apply, eg if operated at night.

Table 2-2-1. Dimension requirements (see Figure 2-2-1)

Dimension	Maximum distance	Comments
Width	2.5m 1.25m from each side of the longitudinal centreline	Measurement does not include: <ul style="list-style-type: none"> • collapsible mirrors which extend no more than 240mm from the body • direction indicators and side-marker lamps • cab exterior grab rails that extend no more than 50mm from the side of the body • ropes, lashings, straps, chains and related connectors and tensioning devices that extend no more than 25mm from either side, and that are not permanently or rigidly fixed to the vehicle • the bulge towards the bottom of a tyre.
Overall length	12.6m (no tow coupling fitted) 11.5m (tow coupling fitted)	Measurement does not include collapsible mirrors.
Height	4.25m	Measurement does not include load restraining devices (ropes, lashings, straps, chains, covers and related connectors and tensioning devices) that extend no more than 25mm above the vehicle, and that are not permanently or rigidly fixed to the vehicle.
Forward distance	9.5m (no tow coupling fitted) 8.5m (including tow coupling if fitted)	Forward distance is measured from the rear axis (Note 2) to the front of the vehicle. Measurement does not include collapsible mirrors.
Rear overhang	4m	Rear overhang is measured from the rear axis (Note 2) to the rear of the vehicle.
Front overhang	3m	Front overhang is measured from the front edge of the driver's seat in the rearmost position to the front of the vehicle.

Table 2-2-2. Hazard warning equipment requirements (see Figure 2-2-4 for vehicle category thresholds)

Vehicle category (see Figure 2-2-4)	Dimension	Limits (up to and including)	Required hazard warning equipment
Category 1	Width/forward distance Length Front overhang Rear overhang	2.5m/11.4m, or 3.1m/10.5m, or 3.7m/8.5m, or 25m, or 7m, or 7m	Flags ¹ or panels ² fitted on each side at the front and rear as close as practical to the outside edge
Category 2 (not including category 1)	Width/forward distance Length Front overhang Rear overhang	2.5m/13.3m, or 4.5m/8.5m, or 35m, or 10m, or 10m	1. Panels ² fitted on each side at the front and rear as close as practical to the outside edge 2. OVERSIZE sign ³ fitted at the front and rear if more than 3.1m wide 3. Revolving amber beacon fitted so that it is visible to approaching traffic if the vehicle is more than 3.7m wide
Category 3 (not including category 2)	Width/forward distance	2.5m/20m 5m/20m 5m/8.5m	1. Panels ² fitted on each side at the front and rear as close as practical to the outside edge 2. OVERSIZE sign ³ fitted at the front and rear 3. Revolving amber beacon fitted so that it is visible to approaching traffic if the vehicle is more than 3.7m wide
Category 4 (not including category 3)	Width/forward distance	11m/20m 11m/8.5m	1. Panels ² fitted on each side at the front and rear as close as practical to the outside edge 2. OVERSIZE sign ³ fitted at the front and rear 3. Revolving amber beacon fitted so that it is visible to approaching traffic if the vehicle is more than 3.7m wide

¹ Flags:

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

² Hazard warning panels:

- must be reflective yellow-green with a reflective orange diagonal stripe
- must be of at least the minimum dimensions and the colours specified in **Figure 2-2-2**.

³ OVERSIZE sign:

- must be black lettering on a yellow-green background
- must be at least 300mm x 1100mm in size
- may be in two parts: OVER and SIZE.

Figure 2-2-1. Dimension requirements

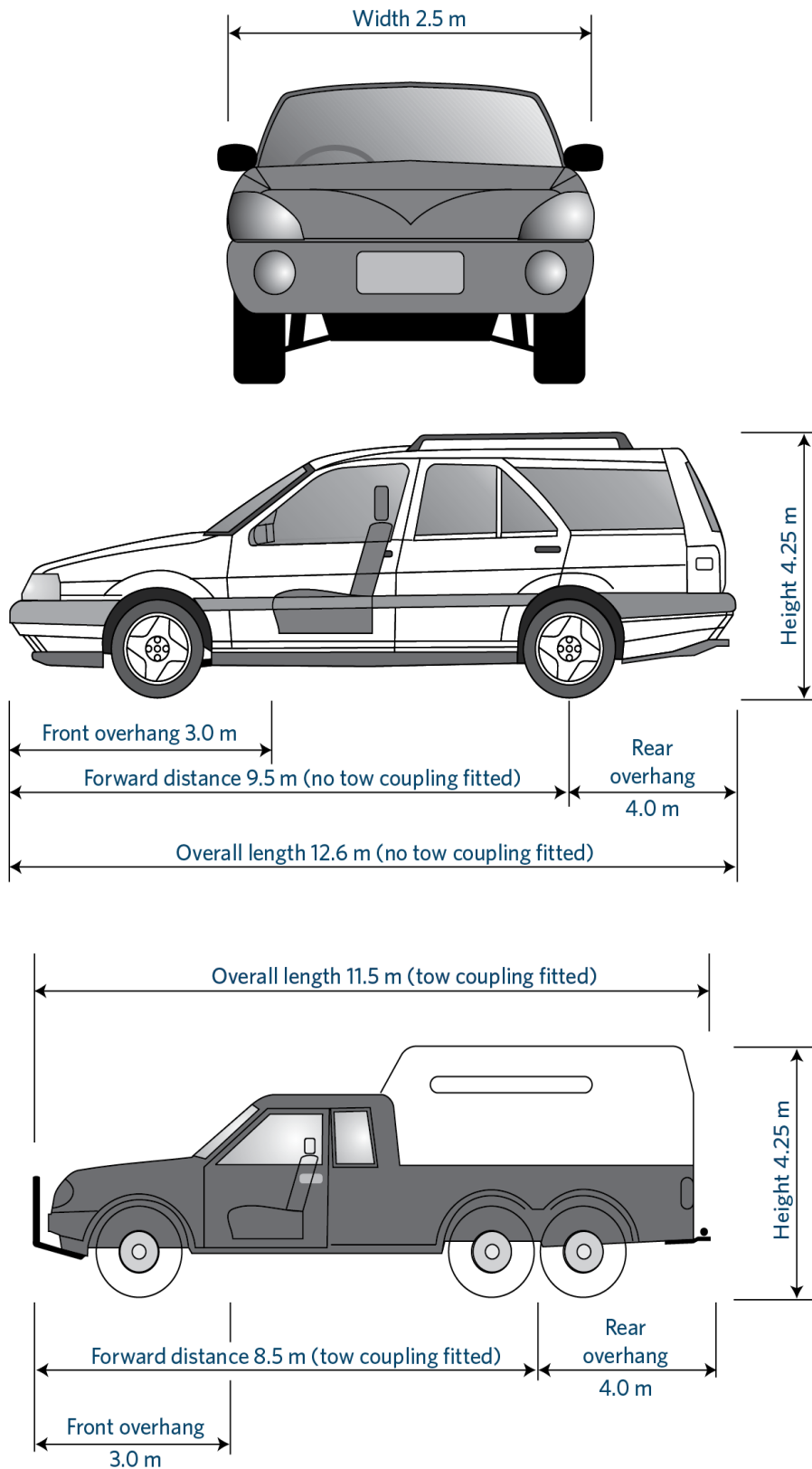
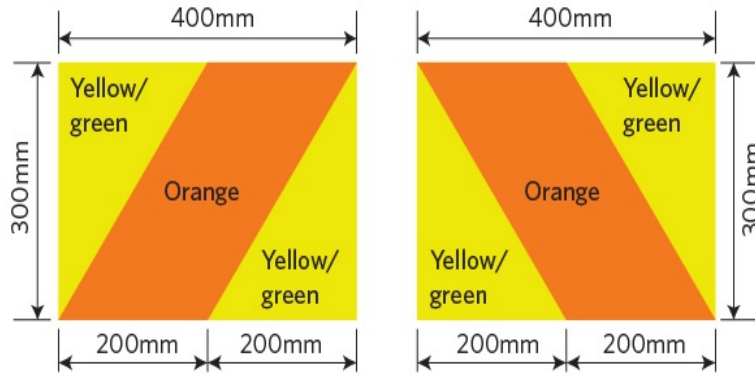


Figure 2-2-2. Hazard panel details

Display these panels



or these panels

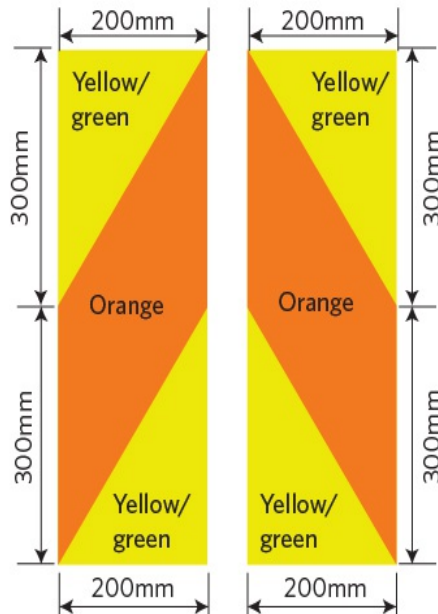


Figure 2-2-3. Hazard panel location and orientation

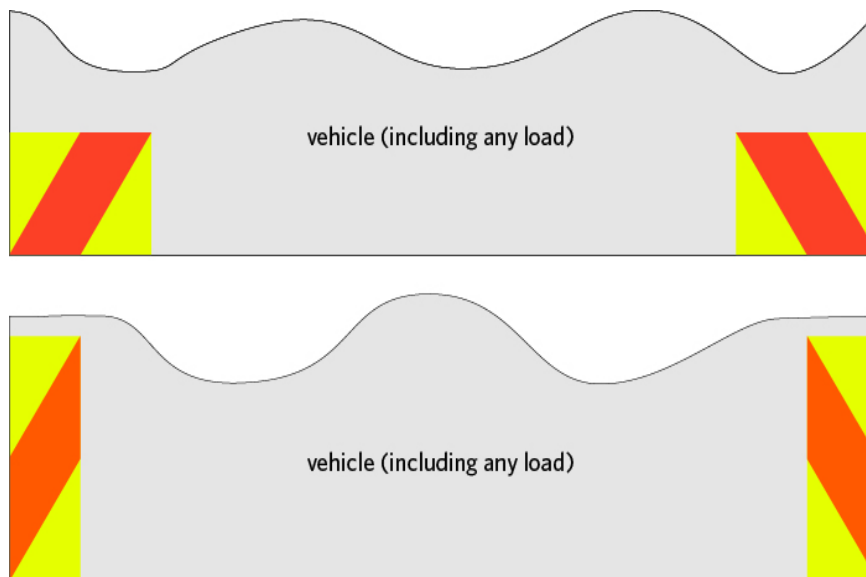
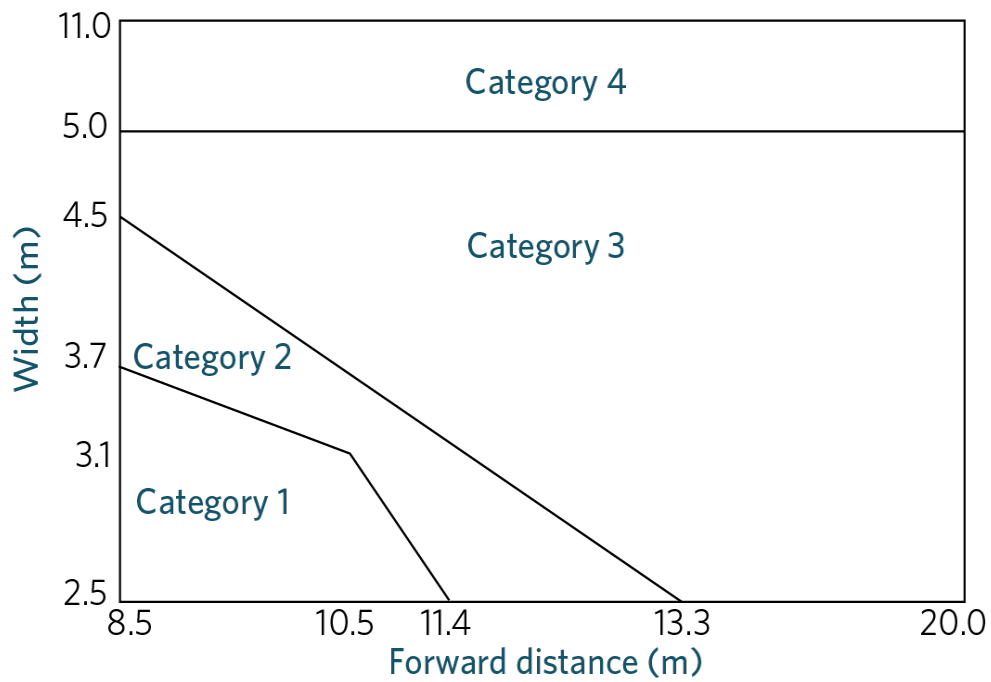


Figure 2-2-4. Vehicle categories and width/forward-distance thresholds

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



Summary of legislation

Applicable legislation

- [Land Transport Rule: Vehicle Dimensions and Mass 2002](#).

Mandatory equipment

1. A rigid vehicle, or an articulated bus, with a GVM of 3500kg or less that exceeds the dimensions in **Table 2-2-1** must meet the requirements in **Table 2-2-2**.
2. A vehicle may exceed the dimensions in **Table 2-2-3** only if it is:
 - a) a specialist overdimension vehicle ([Note 3](#)), or
 - b) a vehicle designed primarily to transport overdimension loads, or
 - c) a vehicle operating on a valid permit, exemption or approval.