

Land Transport Rule: Passenger Service Vehicles 1999

Rule 31001

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AMENDMENTS

- Land Transport Rule: Passenger Service Vehicles Amendment 2005 (Rule 31001/1)
- Land Transport Rule: Passenger Service Vehicles Amendment 2007 (Rule 31001/2)
- Land Transport Rule: Passenger Service Vehicles Amendment 2007 (Rule 31001/3)
- Land Transport Rule: Passenger Service Vehicles Amendment 2009 (Rule 31001/4)

Objective of the rule

Land Transport Rule: Passenger Service Vehicles 1999 specifies the legal requirements for the design and construction of all passenger service vehicles in New Zealand. Passenger service vehicles must comply with the requirements in this rule so that the public will be assured that any vehicles offering a passenger service in New Zealand are safely designed and constructed. The passenger service industry affects a large percentage of the population, including commuters, long-distance travellers, school pupils, taxi passengers, tourists. In addition, the definition of “passenger service vehicle” also includes privately owned and operated vehicles that have more than 12 seats or that are heavy motor vehicles with more than nine seats.

A key factor in the decision to produce this rule was the need to update existing legislation (the Passenger Service Vehicle Construction Regulations 1978) in order to cover new types of passenger service vehicles (minivans, minibuses); new technologies; and new safety standards and practices being introduced overseas. Several provisional actions had previously been taken to amalgamate these new vehicle types into the law, and to take account of the relevant approved vehicle standards. However, it was necessary to incorporate these changes into the overall legislation, and to re-examine the legislation with a focus on safety.

The rule covers all vehicles used in passenger service, with some additional requirements according to whether the vehicle is “light” or “heavy”, depending on the gross vehicle mass. The rule sets some new requirements for vehicles which enter service as passenger service vehicles after specified application dates. It also requires minor modifications to some vehicles which were providing a passenger service in New Zealand before the rule came into force.

The rule is an essential element of the safety framework governing passenger service vehicles in New Zealand. It links with Land Transport Rule: Vehicle Standards Compliance 1998 which came into force on 1 March 1999. That rule sets certification procedures for ensuring vehicle compliance. The rule also refers to Land Transport Rule: Glazing 1996 as well as Land Transport Rule: Door Retention System 1997. Such references are to the most recent versions of the three rules.

Approved vehicle standards from recognised overseas organisations have been taken into account and some of these have been “incorporated by reference” in accordance with section 165 of the Land Transport Act 1998.

Extent of consultation

The draft Passenger Service Vehicles Rule underwent an extensive process of consultation including meetings with representatives of the bus and taxi industries, vehicle manufacturers, compliance agencies and concerned users of passenger service vehicles. This consultation extended over more than five years, and began with discussion of the preliminary (red) draft of the rule which was released in August 1993. After discussion, the red draft was extensively restructured, both in format and content.

The yellow draft, for public discussion, was released in November 1994, with a closing date for submissions in March 1995. The draft was publicised in metropolitan newspapers, the *New Zealand Gazette* and in industry publications. The draft rule was made available for reference at public libraries throughout New Zealand and was also sent to libraries and transport authorities overseas. Copies were sent to those individuals and organisations who expressed an interest in the rule and to those who had commented on the red draft.

A high degree of interest was shown in this rule. Eighty-six submissions were received on the yellow draft, and many of these were complex and detailed discussions of the technical proposals in the draft rule. Those people and organisations who made submissions on the yellow draft were sent a copy of the summary of submissions in July 1995. There were also subsequent informal discussions with interested groups and individuals.

The draft rule was re-examined during 1997 to ensure that it fitted in with the strategy which had been developed for the vehicle standards rules, which set safety standards for systems and components of all vehicles entering the New Zealand fleet and throughout their on-road life. The industry was consulted on a revised draft of the rule before preparation of the final rule.

Part 1 Rule requirements

(r 1.1 to r 10.5)

Section 1 Application

1.1 Title

This rule is to be cited as Land Transport Rule: Passenger Service Vehicles 1999.

1.2 Scope of the rule

1.2(1) This rule applies to passenger service vehicles in New Zealand, except those vehicles specified in 1.6.

1.2(2) A motor vehicle which entered service as a passenger service vehicle in New Zealand:

- (a) before 23 September 1954 must comply with all requirements of the rule or comply with:
 - (i) sections 1, 9, 10, 5.4(4)(a), and 7.3(2)(a) of this rule; and
 - (ii) the requirements of the Passenger Service Vehicle (Constructional) Regulations 1936 other than regulations 24, 34 and 44(2);
- (b) on or after 23 September 1954 and before 1 September 1999 must comply with all requirements of this rule;
- (c) on or after 1 September 1999 must comply, according to the vehicle class, with either:
 - (i) all requirements of this rule; or
 - (ii) all the requirements of *UN/ECE Regulation No. 36* and *UN/ECE Regulation No. 66* or *UN/ECE Regulation No. 52*, whichever is relevant to the vehicle and whichever version is in force at the time when the vehicle enters service as a passenger service vehicle in New Zealand, and with sections 1, 6 8, 9 and 10, and 7.1, 7.2, 7.3 and 7.4 of this rule.

1.2(3) A passenger service vehicle which has been modified on or after 1 September 1999 must comply with the requirements of this rule which:

- (a) are relevant to that modification and to the vehicle; and
- (b) would be applicable to a vehicle entering service for the first time on that date.

1.3 Date when rule comes into force

This rule comes into force on 1 September 1999.

1.4 Certification

A passenger service vehicle must be certified for compliance with this rule in accordance with Land Transport Rule: Vehicle Standards Compliance [2007].

1.5 Application of rule provisions

- 1.5(1) If there is a conflict between a provision of this rule and the corresponding provision of any document incorporated by reference in the rule, the provision of this rule applies.
- 1.5(2) If there is a conflict between a provision of this rule and a provision of Land Transport Rule: Vehicle Standards Compliance [2002], the provision of Land Transport Rule: Vehicle Standards Compliance [2002] applies.

1.6 Exceptions

The following passenger service vehicles do not need to comply with this rule:

- (a) motor vehicles used in a service which are exempted from requiring a Transport Services Licence, as specified in the Transport Services Licensing Act 1989;
- (b) motor vehicles which are specified as exempt vehicles in the Transport Services Licensing Act 1989;
- (c) ambulances designed to carry recumbent patients;
- (d) motor vehicles designed or modified for lawfully-detained persons;
- (e) New Zealand Defence Force dual-purpose trucks with removable seating;
- (f) New Zealand Defence Force armoured vehicles;
- (g) motor vehicles registered under the Amusement Devices Regulations 1978 that are either:
 - (i) used in adventure tourism; or
 - (ii) trailers designed, constructed and permitted to be drawn at a maximum speed of 50 km/h or less.]
- (h) motorcycles and motorcycles with sidecars.

1.7 Reference to vehicle standards

The full titles of the vehicle standards referred to in abbreviated form in this rule are those specified in the Schedule.

Section 2

Entrance and exit

2.1 Doorways

- 2.1(1) There must be at least one doorway for passenger entry or exit on the left-hand side of the passenger service vehicle, except as specified in 2.1(2).
- 2.1(2) A doorway for passenger entry or exit on the left-hand side of the passenger service vehicle is not required in:
 - (a) an outdoor-access vehicle, if a doorway for passenger entry or exit is provided in the rear; or
 - (b) a vehicle fitted with equipment for people with special mobility requirements.
- 2.1(3) A doorway provided for passenger entry or exit must be clear of obstruction.
- 2.1(4) The width of the doorway opening, when the door is fully open, must be at least 550 mm, except as specified in 2.1(5), 2.1(6), 2.1(8) and 8.3.
- 2.1(5) If there is a central stanchion, the width of the doorway on either side of the stanchion must be at least 550 mm.
- 2.1(6) If a doorway is tapered at the top to accommodate the shape of the passenger service vehicle, the width at any height above the doorway sill must not be less than the minimum width for that height specified in Table 2.1.

Table 2.1 — Doorway width

Height above doorway sill (m)	Minimum width(mm)
up to and including 1.6	550
over 1.6 to 1.8	450
over 1.8 to 1.83	400
over 1.83 to top of doorway	380

- 2.1(7) The height of the doorway above the sill must be at least as high as the minimum aisle height for that passenger service vehicle specified in section 3, except:
 - (a) as specified in 2.1(8), 2.1(9), 2.1(10) and 8.3; and
 - (b) the rear door of an outdoor-access vehicle may have a reduced height if this is required for additional frame strength.
- 2.1(8) If a doorway gives access to less than three rows of seats for a maximum of eight occupants, there are no specific dimension requirements, but the doorway must allow easy entry and exit.
- [2.1(9) There are no specific dimension requirements for the doorways of stretch limousines, but the doorways must allow easy entry and exit.]

- [2.1(10) The minimum height of the doorway above the sill is 1650 mm for a passenger service vehicle that:
- (a) is one of a series of identical vehicles produced in quantities of 1000 or more; and
 - (b) does not have more than 25 passenger seats; and
 - (c) is not allowed to carry standing passengers; and
 - (d) has a gross vehicle mass not exceeding 7000 kg.]

2.2 Doors and their operation

- 2.2(1) Door retention systems in a passenger service vehicle must meet the requirements of Land Transport Rule. Door Retention Systems [2001], according to the class and date of manufacture of the vehicle, except that:
- (a) the reference in [2.2(4)] of that rule to “occupant seated by the door” must, in the case of a passenger service vehicle, be read as “occupant next to the door”; and
 - (b) safety devices, installed during the manufacture of the vehicle to prevent the doors from being opened from inside the vehicle, must be removed or permanently deactivated; and
 - (c) doors that are not controlled by the driver must be able to be opened from both inside and outside the vehicle when someone is in the vehicle, except when the occupant has locked the doors.
- 2.2(2) A power-operated door, its control mechanisms and associated equipment must be designed, constructed and maintained so that the opening and closing force of the door, or its method of operation, is unlikely to injure or trap any person.
- 2.2(3) A door, except a left-front door alongside the driver, on a motor vehicle that entered service as a passenger service vehicle in New Zealand on or after 1 July 2000, must have a device that warns the driver if the door is not closed properly.
- 2.2(4) A door must not lock automatically when it is closed.
- 2.2(5) Speed-sensitive or other automatically operating central-locking devices must be permanently deactivated or removed.
- 2.2(6) Except as specified in 2.2(7), a door which is controlled from the driver's seat must have emergency controls which:
- (a) can be operated in an emergency when the passenger service vehicle is stationary; and
 - (b) are fitted on, or next to the door, both inside and outside the vehicle; and
 - (c) have easy-to-understand operating instructions fitted next to them, both inside and outside the vehicle.
- 2.2(7) A motor vehicle which entered service as a passenger service vehicle in New Zealand before 1 July 2000, need not have emergency door controls inside the vehicle on or next to the door if there is a sign by the door, in letters at least 10 mm high, which states: “In an emergency use door control by the driver's seat”.
- [2.2(8) Despite 2.2(1)(b), child safety locks do not need to be removed from, or permanently deactivated in, a small passenger service vehicle provided that a sign, approved by the Agency, is displayed at the outer door handle.]

2.3 Entry and exit steps and ramps

- 2.3(1) Entry and exit steps and ramps must provide safe entry or exit for the occupants of a passenger service vehicle, and the step-tread surfaces must be of a non-slip material.
- 2.3(2) Permanent external steps and ramps on the side of the passenger service vehicle must not extend more than 20 mm beyond the adjacent body line of the vehicle, and must be constructed so that they are not likely to injure any person.
- 2.3(3) Manually operated extending steps on the side of the passenger service vehicle must comply with 2.3(2) both when they are folded away and when they are in the extended position.
- 2.3(4) Retractable steps in a light passenger service vehicle must comply with the requirements of the version of *UN/ECE Regulation No. 52* which was applicable either:
- (a) if they were fitted before the vehicle entered service as a passenger service vehicle in New Zealand, at the time when the vehicle entered service as a passenger service vehicle in New Zealand; or
 - (b) if they were fitted after the vehicle entered service as a passenger service vehicle in New Zealand, at the time the steps were fitted.

2.4 Additional provisions for heavy passenger service vehicles

- 2.4(1) A heavy passenger service vehicle must comply with the requirements in 2.4.

Doorways

- 2.4(2) Doorways for passenger entry or exit must be on the left-hand side of a heavy passenger service vehicle, except as specified in 2.1(2).
- 2.4(3) A heavy passenger service vehicle must be fitted with handrails or handholds which are suitable to assist people entering and leaving the vehicle.

Entry and exit steps and ramps

- 2.4(4) The step dimension criteria specified in 2.4(5)(a) and 2.4(6) do not apply to:
- (a) a left-front passenger entrance providing access for less than three passenger seating positions; or
 - (b) any entrance of an outdoor-access vehicle.
- 2.4(5) [Except for a stretch limousine, if the floor] of a heavy passenger service vehicle at the entrance or exit door is more than 410 mm above the surface of the level roadway, there must be a step or ramp which complies with the following requirements:

- (a) the distance from the ground to the tread surface of the lowest entrance level must be less than 410 mm when measured with the unladen vehicle:
 - (i) on a flat horizontal surface; and
 - (ii) if the height of the suspension can be adjusted from the driver's seat, the vehicle is in its lowest suspension position; and
 - (b) a panel must be fitted to prevent the feet of seated passengers from protruding into any nearby stairwell or ramp; and
 - (c) a guard-rail or equivalent item must be fitted:
 - (i) to the rearward side of any stairwell or ramp, if passengers can stand or sit behind the stairwell or ramp; and
 - (ii) to the forward side of the stairwell or ramp if there is a rearward- or sideways-facing seat in front of it, or if passengers can stand in front of it; and
 - (d) retractable steps must comply with the requirements of the version of "UN/ECE Regulation No. 36" which was applicable either:
 - (i) if they were fitted before the vehicle entered service as a passenger service vehicle in New Zealand, at the time when the vehicle entered service as a passenger service vehicle in New Zealand; or
 - (ii) if they were fitted after the vehicle entered service as a passenger service vehicle in New Zealand, at the time the steps were fitted.
- 2.4(6) Entry and exit steps must meet the following dimensional requirements:
- (a) if more than one step is provided, the rise from one step to the next must be less than 300 mm; and
 - (b) the step depth from front edge to inner riser must be at least 200 mm; and
 - (c) the step width parallel to the doorway must be at least 550 mm.
- 2.4(7) If more than one step is provided, any intermediate step which is cut away to allow space for the door to open must be at least 180 mm deep and at least 250 mm wide.

Section 3

Aisles

3.1 Aisle space

- 3.1(1) Except as specified in 3.1(2), an aisle must provide unobstructed access throughout the passenger service vehicle from each doorway used for passenger entry and exit.
- 3.1(2) An aisle is not required if:
- (a) there is a door alongside every seat or every row of forward- or rearward-facing seats; or
 - (b) a doorway:
 - (i) gives access to a compartment with less than nine seating positions in two rows of seats which face each other; and
 - (ii) opens into the space between the seats; or
 - (c) the sideways-facing seats in an outdoor-access vehicle have at least a 300 mm space between the front edges of seats which face each other, and there is at least 300 mm foot room for any other seats.
- 3.1(3) The aisle must be clear of any fixture, except that lights, push buttons, air vents, and similar devices may project up to 5 mm into the required minimum aisle height space, provided it is designed to minimise the risk of injury to passengers.

3.2 Aisle steps and ramps

- 3.2(1) Aisle steps, internal ramps, and landings must be provided with suitable handrails, handholds, or handgrips.
- 3.2(2) Aisle steps must comply with the following requirements:
- (a) the steps must be permanently fixed and must not encroach on any foot room or seating space specified in 4.1 and 4.5; and
 - (b) except as specified in 3.2(3), the steps must be arranged so that any passenger, upon exiting the passenger service vehicle, steps only downwards; and
 - (c) the rise from one step to the next or, in the case of a sunken aisle, the rise up to the seating area, must be less than 250 mm; and
 - (d) the depth of the step from the front edge to the rise of the next step must be at least 200 mm; and
 - (e) the width of the step must not be less than the minimum aisle width for that vehicle; and
 - (f) step-tread surfaces must be of a non-slip material.
- 3.2(3) If steps are fitted over the engine cover in order to provide access from a central door to seating positions:
- (a) there must be less than three steps; and
 - (b) the combined step height must be less than 400 mm; and
 - (c) the steps must not provide access to more than five seating positions.
- 3.2(4) The gradient of an aisle must not be steeper than:
- (a) 1 in 8 where standing passengers are not permitted; and
 - (b) 1 in 12.5 where standing passengers are permitted.

3.3 Passenger service vehicles whose Certificates of Loading allow standing passengers

- 3.3(1) If the Certificate of Loading allows standing passengers to be carried on the passenger service vehicle, the aisles must comply with the requirements in 3.3.
- 3.3(2) The aisle width must be at least 380 mm, except in the following situations where it only has to be at least 300 mm:
- before 1 July 2002, if the Certificate of Loading allows school pupils to stand on the passenger service vehicle; or
 - on or after 1 July 2002, if the Certificate of Loading allows only primary- and intermediate-school pupils to stand on the passenger service vehicle.

Table 3.1 — Aisle height

Aisle length (mm)	Minimum aisle height (mm)
1900 or less	1350
1901 to 2000	1390
2001 to 2100	1430
2101 to 2200	1470
2201 to 2300	1510
2301 to 2400	1550
2401 to 2500	1590
2501 to 2600	1620
2601 to 2700	1660
2701 to 2800	1700
2801 to 2900	1740
2901 and greater	1780

- 3.3(3) The aisle height must be at least 1.83 m, measured from the floor to the ceiling.
- 3.3(4) Handrails, handholds, or handgrips must be fitted, whose number and location must be appropriate for the number of passengers permitted to occupy the aisle and for passengers of different heights.
- 3.4 Passenger service vehicles whose Certificates of Loading do not allow standing passengers**
- 3.4(1) If the Certificate of Loading does not allow standing passengers to be carried on the passenger service vehicle, the aisles must comply with the requirements in 3.4
- 3.4(2) The aisle width must be at least 300 mm.
- 3.4(3) In a single-decked vehicle, except as specified in [3.4(6) or] 8.3(1), the aisle height, measured from the floor to the ceiling, must be:
- at least 1.2 m, if the vehicle has less than 13 seats, including the driver's seat; or
 - at least the amount specified in Table 3.1 for the length of the aisle, if the vehicle has more than 12 but less than 18 seats including the driver's seat; or
 - at least the amount specified in Table 3.1 for the length of the aisle, but more than 1.5 m, if the vehicle has more than 17 seats including the driver's seat.
- 3.4(4) The aisle length referred to in Table 3.1 is the longest aisle in a compartment measured as follows:
- if only one doorway opens into that aisle, measured from:
 - the front edge of the doorway to the front edge of the front seat serviced by that aisle; or
 - the rear edge of the doorway to the front edge of the rearmost seat serviced by that aisle; or
 - if more than one door opens into the aisle:
 - measured from the front edge of the front doorway to the front edge of the front seat serviced by that aisle; or
 - measured from the rear edge of the rearmost doorway to the front edge of the rearmost seat serviced by that aisle; or
 - measured to the point halfway between the front edge of the rearmost doorway to the rear edge of the front doorway.
- 3.4(5) In a double-decked vehicle, the aisle height must be at least:
- 1.74 m for the lower deck; and
 - 1.72 m for the upper deck.
- [3.4(6) In a stretch limousine, the aisle height must be equal to or greater than the height of the doorway(s) servicing that aisle.]

Section 4
Seating

4.1 Passenger seats

4.1(1) Seat dimensions and spacings in section 4 must be measured with uncompressed seat padding.

Height above seats

4.1(2) In a passenger service vehicle which has more than nine seats, the vertical clearance above the seat cushion, when measured 350 mm in front of the backrest, must be at least:

- (a) 850 mm for the driver's seat and for the front passenger seats located in line with the driver's seat for light vehicles; and
- (b) 900 mm for all other seats.

Shoulder-room width

4.1(3) In a passenger service vehicle which has more than nine seats, the passenger seating positions must comply with the following requirements, except as specified in 4.5:

- (a) the seat width must be at least 410 mm, when measured at the widest point of the seat cushion, if the vehicle entered passenger service before 1 July 2000; and
- (b) the shoulder-room width must be at least 450 mm, if the vehicle entered passenger service on or after 1 July 2000; and
- (c) the shoulder-room width must be measured 150 mm in front of the backrest, above the seating surface, parallel to the seat width, at a height between 270 mm and 650 mm above the centre of the seat cushion; and
- (d) shoulder room may encroach into the aisle provided that the encroachment is less than 40 mm on each side of the aisle; and
- (e) for seats next to the wall of the vehicle, the wall or window may encroach into the upper corner of the shoulder room if the encroachment is not larger than a triangular area which is 20 mm wide at the upper edge and 100 mm long at the side edge of the shoulder room.

Seat spacing

4.1(4) Passenger seating positions must comply with 4.1(5) to 4.1(7) except as specified in 4.5.

[4.1(5) For non-reclinable seats, forward- or rearward-facing seats, which face in the same direction, must comply with the following:

- (a) the seat spacing must be measured horizontally, immediately above the seat cushion, or 150 mm above the seat cushion and between:
 - (i) the backrest of the seat and the rear of the seat, if any, immediately in front of it; or
 - (ii) the backrest of the seat and the rear surface of the partitioning or protecting device, if any, in front of the seat; and
- (b) the seat spacing must be at least 650 mm.]

[4.1(5A) For reclinable seats, the seat spacing of forward- or rearward-facing seats, which face in the same direction, must be:

- (a) at least 650 mm when measured:
 - (i) with the seat in the upright position; and
 - (ii) horizontally, immediately above the seat cushion, or 150 mm above the seat cushion; and
 - (iii) between the backrest of the seat and the rear surface of the partitioning or protecting device, if any, in front of the seat; or
- (b) at least 650 mm when measured:
 - (i) with the rear seat in the upright position and the front seat reclined to its maximum angle or by 30 degrees from the vertical, whichever is the smaller angle; and
 - (ii) horizontally at the height of the rearmost point of the front seat; and
 - (iii) between the backrest of the rear seat and the rear of the front seat; or
- (c) at least 660 mm when measured:
 - (i) horizontally, 610 mm above the floor; and
 - (ii) with the front seat reclined to the maximum angle and the rear seat in an upright position; and
 - (iii) between the backrest of the rear seat and the rear of the front seat; or
- (d) at least 760 mm when measured:
 - (i) with both the front and rear seat backrests in an upright position; and
 - (ii) horizontally at the height of the rearmost point of the front seat; and
 - (iii) between the backrest of the rear seat and the rear of front seat.]

4.1(6) It must not be possible to adjust a seat, by sliding it backwards, so as to encroach into the area of seat spacing required by 4.1(5) [or 4.1(5A)].

4.1(7) Seats that face each other must comply with the following:

- (a) the seat spacing must be measured horizontally, immediately above the seat cushion, or 150 mm above the seat cushion, between the inside surfaces of the backrests; and
- (b) the seat spacing must be at least 1.3 m, except that in outdoor-access vehicles the seat spacing must be at least 1.2 m.

Foot room

- 4.1(8) Passenger seating positions must comply with the following requirements, except as specified in 4.5:
- (a) the foot room must be measured from a line on the floor, which is:
 - (i) immediately below the front of the seat cushion for seats facing in the same direction; and
 - (ii) not more than 70 mm behind the line immediately below the front of the seat cushion for seats facing each other or sideways-facing seats; and
 - (b) the foot room must extend at least 300 mm in front of this line and be at least 300 mm wide; and
 - (c) if vehicle parts, such as the wheel housing, drive-shaft tunnel, or similar equipment, protrude into the foot-room area, they must not encroach into the area in a manner that is likely to hinder emergency evacuation of the passenger service vehicle.

Armrests

- 4.1(9) A motor vehicle, except any outdoor-access vehicle, which entered service as a passenger service vehicle in New Zealand:
- (a) before 1 July 2000, must have armrests fitted to the open ends of sideways-facing seats; or
 - (b) on or after 1 July 2000, must have armrests fitted to sideways-facing seats at intervals of 1.8 m or less, as well as to the open ends of sideways-facing seats.

4.2 Folding seats

- 4.2(1) If folding crew seats are fitted to a passenger service vehicle:
- (a) they must be fitted only in the stairwell of the front doorway; and
 - (b) they must fold away automatically when unoccupied; and
 - (c) there must be clear signs stating that the seats:
 - (i) are for use by crew members only; and
 - (ii) must be secured in the fold-away position when they are not being used.
- 4.2(2) Folding passenger seats may be fitted to the stairwell of a heavy passenger service vehicle behind the front axle provided that:
- (a) there is an unobstructed doorway in front of the front axle for passenger entry or exit; and
 - (b) the seats are locked automatically, both in use and in the fold-away position; and
 - (c) operating instructions for the seats are clearly displayed; and
 - (d) the seats are designed to minimise the risk of injury to the passengers using the seats; and
 - (e) provision is made to ensure that the seat mechanism cannot cause injury to passengers using the concealed stairwell.

4.3 Driver's seat and access to controls

Position of driver's seat and controls

- 4.3(1) There must not be a seat on the right-hand side of the driver's seat.
- 4.3(2) The driver must have safe and reasonably easy access to the driver's seat.
- 4.3(3) The driver's seat must be adjustable to ensure the driver has access to the driving controls.
- 4.3(4) The driving controls, including the handbrake, must be protected, or located in such a way as to minimise the risk that they will be operated accidentally.
- 4.3(5) If there are passenger seating positions to the left of the driver's seat, the seats and driving controls must be designed and located so that the shoulder width of the passenger seat does not encroach into the space required by the driver when driving. On a motor vehicle that entered service as a passenger service vehicle in New Zealand on or after 1 September 1999, the space designed to be clear of encroachment must:
- (a) extend at least 250 mm to the left of a longitudinal vertical plane through the centre of the steering wheel; and
 - (b) extend for a width of at least 500 mm to the left of the internal surface of the right-hand door, if any, excluding the armrest.

4.4 Vision from the driving position

- 4.4(1) From the driving position there must be an unobstructed field of view to the front and to the left and right of the passenger service vehicle.
- 4.4(2) Seats must not be positioned where their occupants will obstruct the driver's field of view.
- 4.4(3) The field of view from the driving position must ensure, either directly or indirectly, that the driver is provided with a view of both:
- (a) the interior of the passenger service vehicle, except when the vehicle is a stretch limousine; and
 - (b) the exterior vicinity of the doors used by passengers for entry and exit.
- 4.4(4) A passenger service vehicle may have closed-circuit cameras fitted provided that:
- (a) the screens provide the driver with views of the vehicle's:

- (i) interior; or
- (ii) exterior towards the rear of the vehicle when reversing; and
- (b) the screens for the driver's view of the interior of the vehicle are operational at all times when the vehicle is carrying passengers; and
- (c) there must be a separate screen for every camera unless a single screen is fitted with a switching device that automatically defaults back from the selected view to allow the driver to monitor passengers entering and exiting the vehicle.

4.5 Alternative provisions for dedicated primary and intermediate-school buses

On dedicated primary- and intermediate-school buses, the dimensions and spacing of seats, as measured according to 4.1, must comply with the following:

- (a) the shoulder-room width for each seating position must be at least 300 mm; and
- (b) the foot room in front of the seat must be at least 250 mm wide and extend at least 250 mm in front of a line on the floor, which is:
 - (i) immediately below the front of the seat cushion for seats facing the same direction; and
 - (ii) not more than 50 mm behind the line below the front of the seat cushion for seats facing each other or sideways-facing seats; and
 - (iii) if vehicle parts, such as the wheel housing, drive-shaft tunnel, or similar equipment, protrude into the foot room area, they must not encroach into the area in a manner that is likely to hinder emergency evacuation of the vehicle; and
- (c) the seat spacing must be at least 600 mm when measured horizontally, immediately above the seat cushion, or 150 mm above the seat cushion, between the backrest of the seat and the rear of the seat immediately in front of it; and
- (d) seats that face each other must have a spacing of at least 1.2 m when measured horizontally between the backrests, immediately above the seat cushion, or 150 mm above the seat cushion.

Section 5

Emergency exits

5.1 Emergency exits

For the purposes of section 5:

- (a) compartments occupied by persons are:
 - (i) the separated driver's compartment;
 - (ii) the upper and lower passenger compartments of a double-decked vehicle;
 - (iii) the front and rear sections of the passenger compartment of an articulated bus;
 - (iv) the passenger compartment of a single-decked non-articulated bus;
- (b) the surfaces of the passenger service vehicle are:
 - (i) the side walls;
 - (ii) the front and rear faces;
 - (iii) the roof;
 - (iv) the floor of the upper deck of a double-decked vehicle.

5.2 Location and number of emergency exits

- 5.2(1) If the compartment of a passenger service vehicle accommodates:
 - (a) twenty-six or fewer persons, it must have at least two emergency exits; or
 - (b) more than 26 persons, it must have at least three emergency exits; or
 - (c) more than 35 persons, and the vehicle entered service as a passenger service vehicle in New Zealand on or after 1 September 1999, it must have at least four emergency exits.
- 5.2(2) Emergency exits must be:
 - (a) distributed throughout the area used by the occupants of the passenger service vehicle; and
 - (b) on at least two different surfaces of the vehicle.
- 5.2(3) Dedicated emergency exits:
 - (a) must be provided for as many different surfaces as is practicable; and
 - (b) must not be on the left-hand side of the passenger service vehicle if the vehicle has less than three dedicated emergency exits.

5.3 Signs

- 5.3(1) Opening, operating, or breaking instructions must be displayed on or next to every emergency exit, both inside and outside the passenger service vehicle. These must include the following words in letters which are at least 10 mm high:
 - (a) "Emergency door control" for power-operated passenger entry and exit doors; or
 - (b) "Emergency exit" for dedicated emergency exits.
- 5.3(2) A dedicated emergency exit must have:
 - (a) a coloured band on the inside frame, at least 20 mm wide, which contrasts with the background; or

- (b) signs on the exit, both inside and outside the passenger service vehicle, with the words “Emergency exit” in letters which are at least 75 mm high.

5.4 Design and construction of dedicated emergency exits

5.4(1) A dedicated emergency exit, its control mechanisms and associated equipment must comply with the following requirements:

- (a) its operation must be unlikely to injure or trap any person, if it is operated according to the operating instructions; and
- (b) it must open easily from both inside and outside the passenger service vehicle, if a person is inside the vehicle and the vehicle is stationary; and
- (c) it must open outwards; and
- (d) a hinged-type emergency door or emergency window in the side wall of a vehicle must not be hinged on its rear edge; and
- (e) the frame of a dedicated emergency exit must not have sharp edges; and
- (f) security locks or similar devices, if fitted to a dedicated emergency exit, must have a device which gives audible and visible warning to the driver when the exit is locked and the engine is running; and
- (g) if a chain or similar device is used to retain the dedicated emergency exit, it must be easily breakable or detachable.

5.4(2) A dedicated emergency exit which is operated by breaking a glass panel must comply with the following requirements:

- (a) the glazing must be made of readily breakable, toughened safety glass as specified in [Land Transport Rule: Glazing, Windscreen Wipe and Wash, and Mirrors 1999], and must not be laminated; and
- (b) the glass must not be modified, covered or treated in a way which might adversely affect the breakability or the removal of the glass; and
- (c) there must be a special-purpose hammer for breaking the glass, which must be:
 - (i) fitted prominently and securely next to the glass, inside the passenger service vehicle; and
 - (ii) connected to an alarm to warn the driver if the hammer is removed or tampered with.

5.4(3) A push-out or free-falling dedicated emergency exit must not require a force of more than 400 newtons to open it. If it is suspected that the opening force exceeds 400 newtons, the exit must be checked during an inspection as specified in Land Transport Rule: Vehicle Standards Compliance [2002].

5.4(4) A sliding or similar type of dedicated emergency exit, which is likely to jam or malfunction if there is even a slight distortion of the vehicle body or frame, must not:

- (a) be taken into account in determining compliance with section 5 after 1 July 2000, if fitted to a motor vehicle which entered service as a passenger service vehicle in New Zealand before 1 September 1999; and
- (b) be fitted on a motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 September 1999.

5.4(5) A dedicated emergency exit must have an audible alarm system to warn the driver if the opening mechanism is activated, with the exception of:

- (a) a dedicated emergency exit specified in 5.4(2);
- (b) an emergency hatch in the floor of the upper deck of a double-decked vehicle;
- (c) an emergency roof hatch, if its internal opening device is sealed in such a way that it is clearly apparent if the seal has been opened; and
- (d) an emergency window, if its internal opening device is sealed in such a way that it is clearly apparent if the seal has been opened.

5.5 Size of dedicated emergency exits

5.5(1) A dedicated emergency exit which is a doorway must be at least:

- (a) 1200 mm high [unless the vehicle is a stretch limousine]; and
- (b) 500 mm wide.

5.5(2) A dedicated emergency exit which is a window or hatch must have no dimension less than 500 mm, and the free area of the opening must be at least 0.35 m².

5.6 Internal access to dedicated emergency exits

5.6(1) Access to a dedicated emergency exit must not be obstructed.

5.6(2) Seats which are designed to tilt out of the way to provide access to a dedicated emergency exit must comply with the following requirements:

- (a) the tilting mechanism must be single-action and simple to operate; and
- (b) operating instructions must be displayed; and
- (c) the tilting mechanism must have an automatic locking device which locks the seat in the tilted position.

5.6(3) A dedicated emergency exit in a motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 September 1999 must comply with the following requirements:

- (a) a person must not be required to step both upwards and downwards to access the emergency exit; and

- (b) if an emergency exit window is on the side of the vehicle, the lower edge of the emergency exit window opening must not be more than 1 m above the floor adjacent to the emergency exit; and
- (c) if an emergency exit window is in the extreme rear of the vehicle and there are seats in front of it, there must be a permanent shelf to cover any gap between the emergency exit window and the rear of the seats.

Section 6

Safety design features and loading

6.1 Body requirements

- 6.1(1) A passenger service vehicle must have a body which:
- (a) is fit for the purpose and meets the structural requirements in section 7; and
 - (b) contains the occupants or, if open-bodied, meets the requirements in 6.14 and 6.15(5); and
 - (c) if it is an outdoor-access vehicle, by 1 July 2000 must be fitted with energy-absorbent padding on the interior surfaces that could come into contact with the occupants when the vehicle is vigorously manoeuvring or in a crash.
- 6.1(2) On a motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 July 2000, energy-absorbent material must be fitted to:
- (a) the tops of exposed partitions, which are less than 1.2 m high, situated in front of seats; and
 - (b) the tops of seats, except in a limited area:
 - (i) at the upper corners of seat backs which are dedicated handholds and which are integrated parts of the seat frames; or
 - (ii) to which the upper point of a lap-and-diagonal seatbelt is fitted.
- 6.1(3) If there is no seat or partition immediately in front of a passenger, a guard-rail or equivalent fitting must be installed in front of every forward-facing seat to prevent a passenger sitting on the seat from being thrown forward.

6.2 Fire fighting and protection against fire

- 6.2(1) The provisions of 6.2 also apply to auxiliary motors or burners.

Materials and design

- 6.2(2) The design and construction of a passenger service vehicle must minimise the risk of fire.
- 6.2(3) Materials used in the construction and fittings of a passenger service vehicle:
- (a) must be such that, if they are ignited, the risk of emission of harmful fumes and gases is minimised; and
 - (b) must not be of a type which would contribute to the rapid spread of a fire.
- 6.2(4) The exhaust system, including any turbo-chargers and any other heat sources, must be installed, located, shielded and ventilated so that:
- (a) no ignitable or heat sensitive materials could fall on the exhaust system or heat source; and
 - (b) material adjacent to any hot surface forming part of, or connected to, the exhaust system or any other heat source must not, under any operating condition, be heated sufficiently to cause degradation.
- 6.2(5) The design of the engine and engine compartment must ensure that no fuel, oil or other combustible materials could accumulate or drip on to any high temperature surface.
- 6.2(6) The engine compartment must be lined with, or made of, fire-resistant materials.

Fuel tanks and protection against fumes and gases

- 6.2(7) Fuels for a passenger service vehicle and the vehicle's equipment must be carried in permanent fuel tanks.
- 6.2(8) The design and location of fuel tanks must:
- (a) incorporate a device to compensate the internal pressure without fuel overflow and without fuel spillage, even in the case of roll-over of the passenger service vehicle, except as specified in 6.2(8)(b);
 - (b) for a vehicle which entered service as a passenger service vehicle in New Zealand before 1 July 2000, ensure that any fuel overflow will not accumulate on any part of the vehicle.
- 6.2(9) Fuel tanks and fuel lines must be:
- (a) corrosion-resistant; and
 - (b) designed and constructed of durable, fuel-resistant material; and
 - (c) securely mounted; and
 - (d) reasonably protected from collision damage.
- 6.2(10) Access to the fuel-tank filling inlet must be from outside the body of the passenger service vehicle. Each filling inlet must be provided with a leak-proof cap.
- 6.2(11) The design, construction and maintenance of the exhaust system must ensure that:
- (a) emitted heat or fumes cannot harm the occupants of the passenger service vehicle; and
 - (b) the outlet pipe is shielded or located in a position where other road users, or passengers entering or exiting the vehicle, cannot be burned by the exhaust; and
 - (c) the outlet pipe does not discharge on the left-hand side of the vehicle.

Fire extinguishers

- 6.2(12) A passenger service vehicle that has more than twelve seating positions must be equipped with fire extinguishers appropriate to:
- the size of the vehicle; and
 - the materials used in the construction of the vehicle; and
 - the type of fuel used.
- 6.2(13) Every passenger compartment, as defined in 5.1(a), must have at least one fire extinguisher if that passenger compartment has more than twelve seating positions.
- 6.2(14) A fire extinguisher must be:
- inspected regularly as is appropriate for the particular make and model of fire extinguisher, and the date of the inspection must be recorded on or near the fire extinguisher; and
 - sealed so it is clearly apparent if it has been discharged and needs recharging or replacement.
- 6.2(15) Clear and simple operating instructions, in English or with pictorial symbols, must be attached to each fire extinguisher.
- 6.2(16) One of the fire extinguishers must be located near the driver, clearly visible to the passengers.

6.3 Heating, ventilation and air-conditioning

- 6.3(1) An interior heating or air-conditioning system installed in a passenger service vehicle must comply with the following requirements:
- an interior heating or air-conditioning system must be designed and constructed so that no harmful fumes associated with its operation can be introduced into the vehicle; and
 - an interior heating system:
 - must be installed in a way that will minimise the risk of occupants being burned; and
 - must not use gases from the exhaust system, directly or by means of gas-to-gas heat exchangers; and
 - an air-conditioning system must comply with the following:
 - refrigerants used in the system must be properly formulated and approved by the refrigerant manufacturer and the manufacturer of the system; and
 - in a vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 July 2000, the design and installation of the system must minimise the risk that any part of the system could rupture and release lubricant or refrigerant in an area where it could come into contact with an excessive heat source; and
 - in a vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 July 2000, if the system is equipped with a device for the release of excessive pressure, the refrigerant and lubricant released by it must not enter the passenger compartment, and must not contact the exhaust system or any other excessive heat source.
- 6.3(2) A passenger service vehicle must have ventilation which complies with the following requirements:
- the ventilation system must provide adequate ventilation throughout the length of the passenger compartment; and
 - ventilation must be provided by:
 - opening windows or roof hatches; or
 - forced ventilation; and
 - the ventilation requirement must be calculated for the maximum number of occupants that the vehicle can carry; and
 - if opening windows or roof hatches are the only means of ventilation, the minimum window opening provided must be:
 - 0.013 m² for each seating position, and 0.01 m² for each seated school child, for a vehicle which entered service as a passenger service vehicle in New Zealand before 1 July 2000; or
 - 0.013 m² for each occupant for a vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 July 2000; and
 - the driver must have at least one, independently adjustable means of ventilation; and
 - if forced ventilation is the only means of ventilation, the system must:
 - incorporate at least two independent power-driven fans of similar size and capacity, which together can deliver within two minutes an air volume equivalent to the volume of the passenger compartment; and
 - have fans wired in such a way that a power failure in one fan will not affect the other; and
 - be designed and constructed to minimise the risk of occupants being harmed by the system or its components; and
 - ventilation air intakes must be in a position which minimises the possibility of introducing exhaust gases, or other harmful fumes, into the passenger compartment.

6.4 Electrical voltages up to and including 32 volts AC or 115 volts DC

- 6.4(1) The provisions in 6.4 apply to electrical equipment fitted in a passenger service vehicle which operates at voltages up to and including 32 volts AC or 115 volts DC.
- 6.4(2) The electrical current ratings appropriate to that make and model of cable as installed in the passenger service vehicle must not be exceeded.
- 6.4(3) Electrical cables must be:
- (a) insulated and protected from heat, water, fuel, oil and other fluids used in the passenger service vehicle; and
 - (b) held securely in position and protected from damage due to cutting, abrasion or chafing.
- 6.4(4) If any cable enters or passes through the passenger compartment, then secure covers must be installed to provide protection from damage.
- 6.4(5) Fuses, circuit-breakers or other current-limiting devices must be included in electrical circuits other than those supplying the starter, ignition, glow plug, engine stopping or battery. Circuits feeding low consumption equipment may be protected by a common device provided that the maximum current does not exceed 20 amperes.
- 6.4(6) Where electrical cables or equipment are installed in a passenger service vehicle, there must be a sign warning of the operating voltage adjacent to any detachable service cover giving access to the electrical cables or equipment.

6.5 Electrical voltages more than 32 volts AC or 115 volts DC

- 6.5(1) The provisions in 6.5 apply to electrical equipment fitted in a passenger service vehicle which operates at voltages of more than 32 volts AC or 115 volts DC.
- 6.5(2) Inspections must be carried out by a person registered under either section 75 or section 77 of the Electricity Act 1992.
- 6.5(3) Electrical cables, having regard to the expected normal circumstances of the vehicle's operation, must:
- (a) be adequate to carry the current in the circuit; and
 - (b) be stranded and insulated in a safe and appropriate manner.
- 6.5(4) Electrical cables under the chassis and in other positions exposed to water and dirt must be enclosed along their length by rubber hose or other equivalent non-conducting material. The enclosing material must extend into the enclosed region of the electrical equipment fed by the cable.
- 6.5(5) Electrical cables which are not enclosed must be bushed or insulated to prevent them from chafing against metalwork connected to the chassis or within metal enclosures of electrical equipment. Any corners in the metalwork must be rounded. Any clamps to metalwork must be made of insulating materials and must be securely attached.
- 6.5(6) Electrical conductors under the chassis and in other exposed positions must be protected from water and dirt. Non-insulated conductors must be enclosed to prevent contact with any person when in use.
- 6.5(7) The enclosures of electrical equipment which could be touched by any occupant must be constructed of insulating material or bonded to the chassis.
- 6.5(8) A testing outlet must be provided to enable measurement of any leakage of current from the electrical wiring and equipment. Metal enclosures of electrical equipment not bonded to the chassis must be electrically connected to the testing outlet.
- 6.5(9) The insulation of electrical cables and equipment must be maintained in such a condition that any leakage of current does not exceed 0.6 milliamperes per 100 volts. The leakage of current must be checked as regularly as is appropriate for that particular make and model of equipment or cable, or at least daily if the appropriate regularity is unknown. The operator must keep the recorded test results for three years.
- 6.5(10) Cut-outs for the protection of any auxiliary circuit must be connected near the main supply cables. An emergency power cut-off switch must be provided in such a position that it can be operated by the driver.
- 6.5(11) Trolley-booms and heads must be designed and constructed to minimise the risk of injuring any person if the boom swings or falls when the head is detached from the overhead wire.

6.6 Loading

- 6.6(1) A passenger service vehicle must be designed and constructed to ensure that:
- (a) the chassis ratings are not exceeded; and
 - (b) at any normal loading condition of the vehicle:
 - (i) at least 25% of the actual weight is carried on the front axle or front-axle combination; and
 - (ii) no component overloading will occur.
- 6.6(2) For the purposes of 6.6(1), the permitted loading imposed by the trailer must also be taken into account if the passenger service vehicle is fitted with a tow bar.

6.7 Suspension and drive line

- 6.7(1) The suspension must be strong enough for reasonably foreseeable conditions of loading and operation.
- 6.7(2) A passenger service vehicle must be designed, constructed and maintained so that no excessive body sway will occur which is likely to adversely affect the steering stability.
- 6.7(3) Axle-stops, shackles, or similar devices must be maintained within safe tolerance of their original condition.
- 6.7(4) Devices to protect against drive-shaft failure must be maintained within safe tolerance of their original condition.

6.8 Baggage, freight and pushchairs

- 6.8(1) A passenger service vehicle and its fittings must be designed, constructed and maintained so that baggage and freight can be safely secured or contained to protect occupants, pedestrians and other road users from its possible movement.
- 6.8(2) If a passenger service vehicle is designed to carry large or heavy items of freight or baggage, it must have facilities for safe containment, such as a separate cargo compartment or a cargo barrier, which are strong enough to withstand the forces imposed by the cargo during vigorous manoeuvring of the vehicle. For a light vehicle this may be demonstrated by compliance with the version of *Australian Standard/New Zealand Standard 4034: 1992* which was applicable at the time the cargo barrier was installed.
- 6.8(3) In a passenger service vehicle which is intended to carry one or more pushchairs carrying infants, there must be a dedicated area for this purpose which must have:
- passive containment facilities to restrain the pushchair during vigorous manoeuvring of the vehicle; and
 - sufficient area for the person in charge of the infant to stay next to the pushchair and to control its movement; and
 - a sign stating that:
 - the infant must be restrained in the pushchair if the pushchair is fitted with a restraint; and
 - the person who is in charge of the infant is responsible for the control of the movement of the pushchair.

6.9 Handrails, handholds, and handgrips

- 6.9(1) Handrails, handholds, and handgrips required by this rule must be of adequate strength for their foreseeable use and be securely attached.
- 6.9(2) In a motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 July 2000, the cross-section of:
- the handholds on doors and seats may have a minimum dimension of 15 mm if one other dimension is at least 25 mm; and
 - all other handholds must have no dimension smaller than 20 mm or greater than 45 mm.

6.10 Windscreen equipment

- 6.10(1) The front windscreen and side windows used by the driver must be equipped with effective demisting equipment, adjustable from the driver's seat.
- 6.10(2) The windscreen must be fitted with a sun-visor or sun-visors adjustable from the driver's seat.

6.11 Signs and instructions

Signs and instructions:

- must be in a simple typeface, in a colour which contrasts with the background of the sign; and
- must not be obscured by other fittings.

6.12 Passenger signals

If direct communication with the driver is restricted by a partition, obstruction or for some other reason, signalling equipment must be installed to provide the passengers with some other form of communication with the driver in case of emergency.

6.13 Towing and tow-bars

- 6.13(1) A passenger service vehicle must not tow heavy trailers.
- 6.13(2) The tow-bar of a motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 September 1999, and a tow-bar fitted to a vehicle after this date, must comply with the version of *New Zealand Standard 5467: 1993* that was applicable at the time the tow-bar was fitted, and must be certified accordingly.
- 6.13(3) The chassis of a passenger service vehicle fitted with a tow-bar must have sufficient strength to withstand the forces imposed on it by the trailer.

6.14 Open-bodied vehicles

- 6.14(1) An open-bodied vehicle which entered service in New Zealand as a passenger service vehicle on or after 1 January 2001 must comply with the provisions in 6.14.
- 6.14(2) On the open-bodied part of a passenger service vehicle, the side walls must extend at least 450 mm above the highest point of the uncompressed seat cushion.
- 6.14(3) An open-bodied vehicle must have a permanent framework to provide reasonable protection for the occupants in the case of the vehicle rolling over.
- 6.14(4) Any upper deck must have adequate drains to prevent water from collecting on it or draining into the body of the passenger service vehicle.

6.15 Additional provisions for heavy passenger service vehicles

- 6.15(1) A heavy passenger service vehicle must comply with the requirements in 6.15.

Ventilation

- 6.15(2) The design and construction of an opening window must ensure that a sphere of 125 mm diameter cannot be passed through that part of the opening which:
- is below the height of 610 mm above the uncompressed seat cushion, if there is a seat other than the driver's seat next to that window; or

- (b) is below 1.5 m above the floor, if there is no seat next to that window.

Interior lighting

- 6.15(3) Interior lights must be positioned so that they adequately illuminate doorways, aisles and steps, but without interfering with the driver's vision when the doors are closed.

Reversing warning

- 6.15(4) A heavy motor vehicle that can carry more than 12 persons, which entered service on or after 1 July 2000, must be fitted with a device that operates when the reverse gear is engaged and the engine is running, and which gives an audible and visible external warning when the vehicle is reversing.

Open-bodied vehicles

- 6.15(5) On a heavy open-bodied vehicle which entered passenger service in New Zealand on or after 1 July 2001, there must be:
- (a) a front screen which extends at least 1 m above the highest uncompressed seat cushion, and at least 1.95 m above the upper floor level; and
 - (b) railings, or another structure through which a sphere of 125 mm diameter cannot be passed, that extends above the side walls to a height of 610 mm above the highest point of the uncompressed seat cushion; and
 - (c) if the vehicle is fitted with seatbelts, signs which state that the passengers must remain seated with seatbelts on, while the vehicle is moving.

Section 7

Stability and structural strength

7.1 Stability requirements

- 7.1(1) A motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 July 2000 must be stable under the following conditions of static tilt:

- (a) a vehicle with a floor not more than 2 m above the ground, and loaded according to 7.1(2)(a) and (b), must be stable on a surface which is subjected to a sideways tilt of 35 degrees, as demonstrated by one of the following methods:
 - (i) written documentation from the vehicle manufacturer; or
 - (ii) type approval; or
 - (iii) calculations, if the centre of gravity can be proven within 50 mm; or
 - (iv) practical testing carried out in accordance with 7.1(2);
- (b) a vehicle with a floor 2 m or more above the ground, and loaded according to 7.1(2)(a) and (b), must be stable on a surface which is subjected to a sideways tilt of 28 degrees, as demonstrated by one of the following methods:
 - (i) written documentation from the vehicle manufacturer; or
 - (ii) type approval; or
 - (iii) calculations, if the centre of gravity can be proven within 50 mm; or
 - (iv) practical testing carried out in accordance with 7.1(2).

- 7.1(2) Practical testing referred to in 7.1(1)(a)(iv) and 7.1(1)(b)(iv) must be carried out under the following conditions:

- (a) the passenger service vehicle must be loaded with weights, representing the occupants' mass in accordance with the deemed mass in 9.2, in all seating positions on the upper deck of a double-decked vehicle and in all seating positions on a single-decked vehicle;
- (b) the roof-rack, if fitted, must also be loaded with the maximum permitted load;
- (c) a passenger service vehicle with a variable suspension system must be tested with the suspension system in the uppermost position;
- (d) the tilt platform may be fitted with a stop to prevent the lower wheels of the passenger service vehicle from slipping sideways; however, this stop must not exceed the height of the tyres, from the tilt platform to the bottom edge of the wheel rim;
- (e) a lightweight strop of sufficient strength may be fitted between the higher side of the passenger service vehicle and the platform to prevent the vehicle from rolling over, and the strop must be fitted in a suitable way while keeping its influence on the test to a minimum;
- (f) if the centre of gravity of the passenger service vehicle, loaded according to 7.1(2)(a) and (b), as determined by a certifier, is not within 50 mm of the longitudinal centre-line, the vehicle must be tested by being tilted to the side of the centre of gravity;
- (g) the stability test and the checking of the accuracy of the test equipment must be carried out under the guidance of a person authorised by the [Agency], and that person must certify that this specification has been complied with.

7.2 Structural strength

- 7.2(1) The structural strength of a passenger service vehicle must be sufficient to provide reasonable protection for the occupants in the event of roof or wall deformation resulting from the vehicle rolling over.
- 7.2(2) The body of a passenger service vehicle must be fit for its purpose and securely fixed to the chassis. The superstructure must be of robust design, and must be made of materials fit for the purpose.
- 7.2(3) The structural strength must be maintained throughout the service life of the passenger service vehicle.

7.3 Roof-racks

- 7.3(1) Fitting a roof-rack to a passenger service vehicle is a modification.
- 7.3(2) A passenger service vehicle on which a roof-rack was fitted:
- (a) before 1 July 2000, must comply with 7.3 by 1 July 2000; or
 - (b) on or after 1 July 2000, must comply with 7.3.
- 7.3(3) The roof-rack must:
- (a) be fitted and rated as appropriate for that particular make and model of passenger service vehicle; or
 - (b) be rated and certified by a person authorised by the [Agency] to do so, and fitted in accordance with that authorised person's instructions.
- 7.3(4) The roof-rack must have a sign or plate on the left-hand side stating:
- (a) the purpose of the roof-rack, if other than for general baggage; and
 - (b) the maximum weight it is allowed to carry; and
 - (c) the manufacturer of the roof-rack; and
 - (d) either of the following:
 - (i) identification of the passenger service vehicle to which it is fitted (make, model and registration number, or Vehicle Identification Number, or chassis number); or
 - (ii) if rated and certified either by the vehicle manufacturer or by a person authorised by the [Agency] to do so, for a vehicle model, the plate need not identify the individual vehicle, but must identify the approval for that vehicle model.

7.4 Additional provisions for light passenger service vehicles

If the roof, or any roof support, of a light passenger service vehicle is modified, a person authorised by the [Agency] to do so, or the vehicle's manufacturer, must certify that this has not reduced the original structural strength of the vehicle.

7.5 Additional provisions for heavy passenger service vehicles

- 7.5(1) A heavy motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 September 1999, excluding a double-decked vehicle, must comply with the requirements in 7.5.
- 7.5(2) A heavy motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 September 1999, or whose structure was modified after that date, must comply with the version of at least one of the following vehicle standards which was applicable at the time the vehicle entered service as a passenger service vehicle in New Zealand or at the time of the modification:
- (a) one of the four options of *UN/ECE Regulation No. 66* or
 - (b) one of the four options of *Australian Design Rule 59/00*; or
 - (c) the structural strength specifications in 7.5(3) to 7.5(14).

Structural strength specifications for heavy motor vehicles

- 7.5(3) The heavy passenger service vehicle must be able to withstand, without permanent deformation, the simultaneous application of forces as follows:
- (a) a force, equivalent to:
 - (i) the weight of half the gross vehicle mass, applied horizontally at right angles to the longitudinal centre-line of the vehicle at the cant-rail or at the topmost corner of the body; and
 - (ii) the unladen weight of the vehicle, applied vertically downwards at the same cant-rail or corner; and
 - (b) the distribution of these forces must be at least approximately proportional to that of the gross vehicle mass along the length of the vehicle.
- 7.5(4) Compliance with 7.5(3) must be established by either:
- (a) a full-scale test; or
 - (b) calculation.
- 7.5(5) If compliance with 7.5(3) is established by a full-scale test on the completed frame on its chassis:
- (a) the heavy passenger service vehicle must be on a level surface; and
 - (b) if the applied forces would cause the vehicle to tilt, restraint must be applied to the chassis or running gear so that the vehicle remains approximately in its normal upright position.
- 7.5(6) If the body structure is wholly or partly constructed of non-metallic materials, the full-scale test in 7.5(5) must not result in:
- (a) a permanent deformation; or
 - (b) a local failure point; or
 - (c) failure of the attachment to the chassis.
- 7.5(7) If compliance with 7.5(3) is established by calculation, for a heavy passenger service vehicle with a structure composed wholly or partly of non-metallic materials or metallic materials of unknown yield stress, the calculation must be based on the aggregated strength of the vehicle's ring-frames or body sections.

- 7.5(8) If the strength of each ring-frame or body section as required for calculations under 7.5(7) is not known, this must be established by:
- carrying out physical testing on a ring-frame or body section to establish the load at which the first point of failure occurs, and this is the strength rating to be assigned to the ring-frame or body section;
 - testing further to establish the loads at the second and third points of failure, with the result that the load at the second point of failure must be within 65% to 85% of the rating and the load at the third point of failure must be within 40% to 60% of the rating;
 - repeating the test on any ring-frame or body section that is not identical in profile and construction to one previously tested, until the strength rating of all ring-frames or body sections of the vehicle are known.
- 7.5(9) If compliance with 7.5(3) is established by calculation for a heavy passenger service vehicle with a structure composed wholly of metallic material of known yield stress, the calculation must be carried out by:
- finite element stress analysis, according to 7.5(10); or
 - the simplified calculation method, according to 7.5(11); or
 - other calculation methods approved by the [Agency] for this purpose.
- 7.5(10) If compliance with 7.5(3) is established by finite element stress analysis for a heavy passenger service vehicle with a structure composed wholly of metallic material of known yield stress:
- it must include at least the whole body-frame structure (including the side-wall-to-floor-frame attachment and the body-frame-to-chassis attachment); and
 - butt-welded and mechanical joints must be separately assessed and justified, if necessary by means of mechanical tests; and
 - any assumption made on the performance of joints or other parts of the structure must be shown to be justified, if necessary, by means of tests; and
 - the calculation must include an appropriate allowance for deterioration during the expected life of the vehicle, having regard to the material of the structure, the specific manufacturing technology, and the conditions under which the vehicle is likely to be operated.
- 7.5(11) If compliance with 7.5(3) is established by the simplified calculation method for a heavy passenger service vehicle with a structure composed wholly of metallic material of known yield stress, the following assumptions must be made:
- the horizontal force is equivalent to half the unladen weight, instead of the force defined in 7.5(3)(a)(i);
 - the roof is a rigid structure;
 - the body is a rigid structure below the waistline;
 - glazing makes no contribution to the structural strength;
 - the window pillars are encastre at the waistline;
 - the roof-to-pillar attachment is of a hinged type;
 - the load, imposed by the horizontal force, is shared by the pillars, and the distribution of load is statically indeterminate; it must be calculated on the basis of the flexible deflection of the pillars, and the deflection of each pillar is proportional to its L^3/IE factor and to the load imposed on it (where L = length of the pillar, I = moment of inertia, E = Young's modulus);
 - the load, imposed by the vertical force, is shared by the pillars which are connected to the cant-rail where the force is applied, and the distribution of the load must be proportional to the area of the cross-section of the pillars.
- 7.5(12) If the simplified calculation method specified in 7.5(11) is used, the calculation must include an appropriate allowance for deterioration during the expected life of the vehicle, having regard to the material of the structure, the specific manufacturing technology, and the conditions under which the vehicle is likely to be operated.
- 7.5(13) Compliance with the requirements in 7.5(3) must be certified by a person specifically authorised by the [Agency] to do so.
- 7.5(14) A heavy passenger service vehicle must be clearly identified by model, manufacturer's description, chassis number, Vehicle Identification Number, or any other means of relating the specific vehicle to the documentation, drawings, quality control procedures and quality assurance programmes presented by the manufacturer or manufacturer's agent or importer to demonstrate compliance of the vehicle with the requirements of this rule. This documentary evidence of compliance must be available for inspection, within a reasonable period of time, on request by a certifier, a police officer, or a person authorised by the [Agency].
- 7.5(15) Any test equipment must be certified by an organisation accredited by Joint Accreditation System-Australia, New Zealand.

[Section 8]

[Requirements for special equipment for persons with disabilities]

[8.1 Application]

- 8.1(1) Clauses 8.2, 8.3 and 8.4 apply to vehicles fitted with equipment for persons with special mobility requirements that enter passenger service in New Zealand on or after 1 July 2000, and to passenger service vehicles fitted with that equipment on or after that date.

8.1(2) Clauses 8.5 and 8.6 apply to vehicles fitted with equipment to assist visually- or hearing-impaired passengers that enter passenger service on or after 1 January 2008, and to passenger service vehicles fitted with that equipment on or after that date.]

8.2 Wheelchair hoists and ramps

[8.2(1) A wheelchair hoist and its attachment to a passenger service vehicle must either:

- (a) comply with the design and construction requirements of versions of *AS 3856.1-1991* and *AS 3856.2-1991*, or *AS/NZS 3856.1:1998* and *AS/NZS 3856.2:1998* that were applicable at the time of attachment; or
- (b) be certified in accordance with Land Transport Rule: Vehicle Standards Compliance 2002 as complying with, or being equivalent to, the technical requirements of *AS 3856.1-1991* and *AS 3856.2-1991*, or versions of *AS/NZS 3856.1:1998* and *[[AS/NZS 3856.2:1998]]* that were applicable at the time of attachment.]

8.2(2) A wheelchair ramp and its fitting to a passenger service vehicle must comply with one of the options in 8.2(1) or with all the following requirements:

- (a) from the driving position, there must be an unobstructed view, either directly or indirectly, of the exterior and interior of the doorway used for entry and exit, and of the ramp and wheelchair parking position; and
- (b) ramps must have a non-slip surface; and
- (c) ramps must be at least 800 mm wide, or at least 760 mm wide with a 20 mm high safety ridge along the side edges; and
- (d) ramps that do not have a small safety ridge along the side edges, must have a conspicuous stripe, at least 20 mm wide, along the side edges of the ramp; and
- (e) there must be adequate illumination of the full extended ramp to enable safe use during the hours of darkness; and
- (f) power-operated ramps must comply with all of the following requirements:
 - (i) if the ramp cannot be seen clearly by the driver, a sensor must be fitted so that the ramp stops or retracts if it meets an obstruction before it is fully extended; and
 - (ii) a device must be fitted which gives audible warning while the ramp is extending or retracting; and
 - (iii) there must be a safety system to prevent the vehicle from moving off while the ramp is extended. If this system is incorporated in the vehicle's brake system, it must be known to be a design appropriate to that particular chassis and be installed as is appropriate for that particular chassis or must be approved and certified by a person authorised by the [Agency] to do so; and
 - (iv) the ramp must be able to be operated manually in the event of a power failure; and
- (g) a ramp which is fully extended from a vehicle parked on a flat level surface must not have a gradient that is steeper than 1 in 4.

8.3 Doorways and interior height

8.3(1) On a passenger service vehicle that is intended to carry wheelchairs, the height:

- (a) from the sill to the top of the doorway must be at least 1.3 m; and
- (b) from the floor to the ceiling, in positions where wheelchairs will be restrained, must be at least 1.48 m.

8.3(2) The doorway width must be at least 800 mm.

8.4 Wheelchair and wheelchair-occupant restraints

8.4(1) A restraint system for a wheelchair, or for a wheelchair and occupant, must:

- [(a) comply with the design and construction requirements of the version of *AS 2942-1987* or the version of *AS 2942-1994/Amdt 1-1998* that was applicable at the time it was attached: or]
- [(b) be certified in accordance with Land Transport Rule: Vehicle Standards Compliance 2002 as complying with, or being equivalent to, the technical requirements of the version of *AS 2942-1987* or the version of *AS 2942-1994/Amdt 1-1998* that was applicable at the time it was fitted, or]
- (c) comply with all of the following requirements:
 - (i) there must be a horizontal handrail adjacent to the wheelchair parking position for wheelchair occupants to steady themselves while the passenger service vehicle is moving; and
 - (ii) the wheelchair must be prevented from tipping backwards; and
 - (iii) a head support must be fitted if the back of the wheelchair occupant's head would be against a window, bulkhead or partition; and
 - (iv) a restraint system must be fitted to prevent the wheelchair from swinging out of position or tipping over; and
 - (v) there must be a sign adjacent to the wheelchair parking position stating that the restraint system must be secured and the wheelchair's brakes applied; and
 - (vi) the restraint system must include easily accessible quick-release mechanisms; and
 - (vii) a person authorised by the [Agency] must certify that the seatbelt anchorage or alternative wheelchair restraint system complies with the version of *Australian Design Rule 5/03* which was applicable at the time it was installed, or can withstand equal loadings in the case of an alternative restraint system.

8.4(2) Compliance with 8.4(1)(b) and 8.4(1)(c)(vii) may be proved by calculation.

[8.5 Signs

- 8.5(1) A sign fitted to a passenger service vehicle to assist visually- or hearing-impaired passengers must comply with the location and illumination requirements in *AS 1428-2 1992* as far as is practicable.
- 8.5(2) If a passenger service vehicle is fitted with a sign that incorporates raised lettering or symbols to assist visually-impaired passengers, the letters or symbols must be at least 0.8 mm above the surface of the sign.
- 8.5(3) If a destination sign is fitted to a passenger service vehicle operated in a scheduled route service, that sign or another complimentary destination sign containing equivalent or similar information must be visible for a passenger who is preparing to board the vehicle and who is outside the front passenger door.]

[8.6 Tactile surfaces and public address systems

- 8.6(1) If the floor covering of a passenger service vehicle has tactile ground surface indicators to orient visually impaired passengers, it must comply as far as is practicable with *AS 1428-2 1992*.
- 8.6(2) If a passenger service vehicle is fitted with a public address system, the system must comply as far as is practicable with *AS 1428-2 1992*.
- 8.6(3) If a passenger service vehicle that is fitted with a public address system is also fitted with a visual sign system for hearing-impaired passengers, the system must ensure that the hearing-impaired passengers can be provided with information equivalent to the information provided for passengers without hearing impairment through the public address system.
- 8.6(4) If the operator of a passenger service vehicle assigns one or more seats to accommodate passengers with a disability or impairment, each seat must be fitted with a sign:
- informing passengers that the seat is assigned for a passenger with a disability or impairment; and
 - requesting that a passenger without a disability or impairment vacate that seat if a passenger for whom the seat is assigned wishes to use it.]

Section 9
Certificate of Loading

9.1 Certificate of Loading

- 9.1(1) A passenger service vehicle must have a Certificate of Loading that on or after 1 July 2001 contains the following, as applicable to the vehicle, in addition to the information required by Land Transport Rule: Vehicle Standards Compliance [2002]:
- for a vehicle with more than nine seating positions, the maximum axle and/or axle-set masses if available;]
 - the maximum roof-rack load;
 - the maximum number of seated:
 - adult passengers;
 - secondary-school pupils;
 - intermediate-school pupils;
 - primary-school pupils;
 - the maximum number of standing:
 - adult passengers;
 - secondary-school pupils;
 - intermediate-school pupils;
 - primary-school pupils.
- 9.1(2) The maximum number of seated passengers must be calculated as follows:
- one person to a seating position; and
 - in the case of seats providing at least 900 mm shoulder room either:
 - according to the number of the fitted seatbelts; or
 - if the seats are not fitted with seatbelts, three primary- or intermediate-school pupils to two seating positions.
- 9.1(3) In addition to, or in substitution for, 9.1(1)(c), the maximum number of passengers in a light passenger service vehicle carrying only seated passengers may, at the written request of the operator or manufacturer to the vehicle compliance certifier, be displayed on the Certificate of Loading as a combination of:
- adult passengers; and
 - primary- or intermediate-school pupils.
- 9.1(4) The maximum number of the standing passengers must be calculated by dividing the area available for the standing passengers by the area required for each standing passenger.
- 9.1(5) The following areas are not available for standing passengers:
- an area, which has an obvious boundary, extending at least 300 mm behind the driver's seat, with a sign stating that passengers must not stand in that area;
 - an area where the internal height is less than 1.83 m, with a sign stating that passengers must not stand in that area;
 - an area where the gradient of the aisle is steeper than 1 in 12.5, with a sign stating that passengers must not stand in that area;

- (d) the area occupied by seats or dedicated as foot room for sitting passengers;
 - (e) stairwells, ramps and the area swept by the doors;
 - (f) the upper deck of a double-decked vehicle;
 - (g) all areas on a single-decked open-bodied vehicle;
 - (h) the area of a motor vehicle in which every seat must be fitted with a seatbelt according to any Act, regulation or rule.
- 9.1(6) The area for standing passengers must have no dimension less than:
- (a) for adult passengers, 380 mm; and
 - (b) for primary- and intermediate-school pupils, 300 mm; and
 - (c) for secondary-school pupils:
 - (i) before 1 July 2002, 300 mm; or
 - (ii) on or after 1 July 2002, 380 mm.
- 9.1(7) The minimum area required for each standing passenger is:
- (a) 0.17 m² for mixed loads of adults, secondary-, intermediate- and primary-school pupils; and
 - (b) 0.15 m² for primary- and intermediate-school pupils.
- 9.2 Deemed mass of occupants**
- 9.2(1) The deemed mass of each occupant is:
- (a) 80 kg for adult occupants; and
 - (b) 65 kg for secondary-school pupils; and
 - (c) 55 kg for intermediate-school pupils; and
 - (d) 42 kg for primary-school pupils.
- 9.2(2) The gross vehicle mass of a passenger service vehicle must not be exceeded when the vehicle is loaded with the maximum deemed passenger loading, which is calculated from the maximum number of passengers allowed in the Certificate of Loading and their deemed mass.
- 9.2(3) [Where specified on the Certificate of Loading, the axle rating(s)] of a passenger service vehicle that has more than nine seats must not be exceeded when the vehicle is loaded with the maximum deemed passenger loading calculated according to 9.2(2).

Section 10

Responsibilities

10.1 Responsibilities of operators

A person who operates a passenger service vehicle must ensure that the vehicle complies with this rule.

10.2 Responsibilities of repairers

A person who repairs a passenger service vehicle must ensure that the repair:

- (a) does not prevent the vehicle from complying with this rule; and
- (b) is carried out in accordance with Land Transport Rule: Vehicle Repair 1998.

10.3 Responsibilities of modifiers

A person who modifies a passenger service vehicle must:

- (a) ensure that the modification does not prevent the vehicle from complying with this rule; and
- (b) notify the operator if the vehicle must be inspected and, if necessary, certified, because there is reason to believe it is:
 - (i) a light vehicle that has been modified to become a low volume vehicle; or
 - (ii) a heavy vehicle that has been modified to affect its safety performance or compliance with this rule.

[10.4 Responsibilities of vehicle inspectors and inspecting organisations

A person authorised by the [[Agency]] to certify a passenger service vehicle for compliance with this Rule under Land Transport Rule: Vehicle Standards Compliance 2002 must not do so if the person has reason to believe that the vehicle does not comply with this Rule.]

10.5 Responsibilities of manufacturers and importers

10.5(1) A person who manufactures or imports a chassis for use in a passenger service vehicle must supply the following with the chassis:

- (a) a certificate or other documentation that:
 - (i) identifies the particular chassis or type of identical make and model of chassis; and
 - (ii) states the maximum axle and component ratings of the chassis; and
- (b) detailed information regarding the maintenance and servicing procedure of the chassis; and
- (c) a manual with detailed instructions to be followed by the person who manufactures or fits a body to the chassis, to ensure the safe design and construction of the vehicle.

10.5(2) A person who manufactures or imports a motor vehicle for operation as a passenger service vehicle or a body to be fitted to a chassis for operation as a passenger service vehicle or installs the fittings within such a body must:

- (a) ensure that the relevant requirements of this rule are complied with; and
- (b) supply a manual with detailed instructions to be followed by a person who operates or maintains the vehicle, to ensure the safe operation of the vehicle.

Part 2 Definitions

[**Agency** means the New Zealand Transport Agency established under section 93 of the Land Transport Management Act 2003]

Articulated bus means a bus consisting of two or more rigid sections which:

- (a) articulate relative to each other;
- (b) have interconnecting passenger compartments that allow passengers to move freely between them;
- (c) are not easily detachable from each other without specialist equipment.

Axle means one or more shafts, spindles, or bearings in the same vertical transverse plane by means of which, in conjunction with wheels mounted on those shafts, spindles, or bearings, a portion of the weight of the vehicle is transmitted to the roadway, provided that:

- (a) if two or more wheels of a motor vehicle are substantially in the same line transversely, and some or all of them have separate axles, the axles of all those wheels are to be treated as one axle; and
- (b) if the longitudinal centre line of any axle of a motor vehicle is less than 1 m distant from the longitudinal centre line of another axle, the two axles are to be treated as one axle (“a dual axle”); and
- (c) for the purposes of measuring the distance of a dual axle from any other axle, the measurement must be taken from the longitudinal centre line of that one of the two axles comprising the dual axle which is nearer to the axle from which the distance is to be measured.

Body includes all of the portion of the vehicle that is designed for the use and accommodation of the occupants and their luggage, and to hold any goods that may be carried.

Certificate of Loading means a certificate of loading issued under any regulation or rule made under the Transport Act 1962 or the Land Transport Act 1998.

[**Certifier**: *Definition Revoked*]

chassis means the structural lower part of a vehicle to which the running gear and body are attached.

chassis rating means a set of data, containing the permitted maximum axle and/or axle-set loads [(if available)], gross vehicle mass, and gross combination mass (if applicable), approved or determined by the [Agency].

[**Child safety lock** means a safety device installed during the manufacture of the vehicle to prevent a door from being opened from the inside of the vehicle.]

Construction means the manufacture, assembly, re-assembly, or modification of a vehicle; and includes all acts and activities related or incidental to the construction of a vehicle.

Crew means the person or group of persons in control or having responsibility for the operation of the vehicle or the well-being of the passengers.

Dedicated emergency exit means any doorway, window, hatch or other opening that is designed and constructed solely to provide a means of leaving the vehicle in the event of an emergency.

Dedicated intermediate-school bus means a passenger service vehicle, the body of which is designed solely or principally for the carriage to and from school of intermediate-school pupils.

Dedicated primary-school bus means a passenger service vehicle, the body of which is designed solely or principally for the carriage to and from school of primary-school pupils.

[**Director**: *Definition Revoked*]

Emergency exit means:

- (a) a door used for the entry and exit of the occupants and, for this purpose, a door of double width is a single emergency exit;
- (b) the access between the front and rear sections of an articulated bus;
- (c) the stairway from the upper deck to the lower deck;
- (d) a dedicated emergency exit.

Entered service as a passenger service vehicle means the most recent occasion of the vehicle entering service as a passenger service vehicle.

foot room means an area on the floor in front of the seat or partially under the seat to accommodate the feet of the person sitting on the seat.

gross vehicle mass means either:

- (a) the maximum permitted mass of a vehicle, which includes the mass of the accessories, the crew, the passengers and load, and is, unless
- (b) applies, the gross vehicle mass specified (subsequent to the latest modification, if any) by the manufacturer of the vehicle; or
- (b) if a person approved for the purpose by the [Agency] determines that the gross vehicle mass should differ from that specified by the manufacturer, taking into account evidence on the capability of the systems and components of the vehicle, or the effects of any modification, the gross vehicle mass is that mass determined by that person.

Heavy motor vehicle means a vehicle with a gross vehicle mass which exceeds 3500 kg.

Hours of darkness means:

- (a) any period of time between half an hour after sunset on one day and half an hour before sunrise on the next day; or
- (b) any other time when there is not sufficient daylight to render clearly visible a person or vehicle at a distance of 100 m.

[**Inspecting organisation** has the same meaning as in Part 2 of Land Transport Rule: Vehicle Standards Compliance 2002.]

Light motor vehicle means a vehicle with a gross vehicle mass of 3500 kg or less.

Low volume vehicle means a motor vehicle of a class specified in Table A of Land Transport Rule: Vehicle Standards Compliance [2002], other than MD3, MD4, ME, NB, NC, TC or TD that is:

- (a) manufactured, assembled or scratch-built in quantities of 200 or less at any one location in any one year, by a manufacturer whose total production of motor vehicles does not exceed 200 units over the same period, and where the construction of the vehicle directly or indirectly affects compliance of the vehicle with any of the vehicle standards prescribed by New Zealand law; or

- (b) modified uniquely, or in quantities of 200 or less at any one location in any one year, in such a way as to affect the compliance of the vehicle, its structure, systems, components or equipment, with a legal requirement relating to safety performance applicable at the time of the modification.

Manufacturer's operating limits means:

- (a) in relation to a motor vehicle, the allowance provided by the vehicle manufacturer in terms of performance capability and dimensions, relative to deterioration, malfunction or damage beyond which the safe performance of the vehicle, as defined by the vehicle manufacturer, is compromised; and
- (b) in relation to a system, component or item of equipment, incorporated in or attached to a vehicle, the allowance provided by the system or component manufacturer in terms of performance capability and dimensions, relative to the deterioration, malfunction or damage, beyond which the safe performance of the system or component or item of equipment (and consequently the vehicle) is compromised.

mass in relation to a vehicle, means the quantity of material contained in or on the vehicle that, when subjected to acceleration due to gravity, will exert downwards on a level surface a force that can be measured as the weight of the vehicle.

[mobility device means—

- (a) a vehicle that—
- (i) is designed and constructed (not merely adapted) for use by persons who require mobility assistance due to a physical or neurological impairment; and
 - (ii) is powered solely by a motor that has a maximum power output not exceeding 1 500 W; or
- (b) a vehicle that the [[Agency]] has declared under section 168A(1) of the Land Transport Act 1998 to be a mobility device.]

modify in relation to a vehicle, means to change the vehicle structure from its original state by altering, substituting, adding or removing any structure, system, component or equipment, but does not include repair; and “modified” and “modification” have corresponding meanings.

motor vehicle means a vehicle drawn or propelled by mechanical power; and includes a trailer; but does not include:

- (a) a vehicle running on rails;
- (b) *Revoked.*
- (c) a trailer (other than a trailer designed solely for the carriage of goods) that is designed and used exclusively as part of the armament of the New Zealand Defence Force;
- (d) a trailer running on one wheel and designed exclusively as a speed measuring device or for testing the wear of vehicle tyres;
- (e) a vehicle designed for amusement purposes and used exclusively within a place of recreation, amusement, or entertainment to which the public does not have access with motor vehicles;
- (f) a pedestrian-controlled machine.
- [(g) a vehicle that the [[Agency]] has declared is not a motor vehicle under section 168A of the Land Transport Act 1998;]
- [(h) a mobility device.]

Occupant in relation to a motor vehicle, means a passenger or a member of the crew, whether seated or standing.

Open-bodied vehicle means a vehicle which is not fully enclosed by a permanent body structure.

Operate in relation to a vehicle, means to drive or use the vehicle on a road, or to cause or permit the vehicle to be on a road, or to be driven on a road, whether or not the person is present with the vehicle; and “operator” has a corresponding meaning.

Outdoor-access vehicle means a motor vehicle that is used to provide access to remote areas solely in connection with outdoor activities.

Passenger means a person travelling in a vehicle but does not include the crew.

Passenger service means the following, but does not include any service specified as exempt from requiring a Transport Service Licence under the Transport Services Licensing Act 1989:

- (a) the carriage of passengers on any road for hire or reward by means of a motor vehicle; and includes the letting on hire of a vehicle by a person who drives the vehicle or provides a driver for the vehicle if, during the hiring, the vehicle is used for the carriage of passengers; and
- (b) the carriage of passengers on any road, whether or not for hire or reward, by means of a passenger service vehicle that is a heavy motor vehicle.

Passenger service vehicle means:

- (a) a motor vehicle used or available for use in a passenger service for the carriage of passengers; or
- (b) a motor vehicle with more than 12 seating positions; or
- (c) a heavy motor vehicle with more than nine seating positions.

rating in respect of a system or component of a vehicle, means the permitted maximum load, approved or determined by the [Agency] as being the safe operational limit for that component or system; and “rated” has a corresponding meaning.

repair in relation to a vehicle, means to restore a damaged or worn vehicle, its structure, systems, components or equipment; and includes the replacement of damaged or worn systems, components or equipment with equivalent undamaged or new systems, components or equipment.

Safe tolerance means the tolerance within which the safe performance of the vehicle, its structure, systems, components or equipment is not compromised, having regard to any manufacturer's operating limits.

Scratch-built vehicle means a motor vehicle which is either:

- (a) assembled from previously unrelated components and construction materials which have not been predominantly sourced from donors of a single make or model and which, in its completed form, never previously existed as a mass-produced vehicle, although the external appearance may resemble or replicate an existing vehicle; or
- (b) a modified production vehicle that contains less than the following components from a mass-produced vehicle of a single make and model:
- (i) 40% of the chassis rails and 50% of the crossmembers, or alternatively 40% of a spaceframe, or 40% of the floorpan of a unitary constructed body, whichever is appropriate; or

- (ii) for light vehicles, 40% of the bodywork (based on surface area of body panels but not including the floorpan, internal bracing, sub panels, bulkheads or firewall).

Seat means an assembly, or part of an assembly, intended to seat at least one person, that may or may not be integral to the vehicle structure.

Seating position means a seat or part of a seat that is of a suitable size and shape for one person.

Service includes:

- (a) an operation carried out on one occasion only;
- (b) an operation carried out solely for the benefit of the persons carrying it out.

[Small passenger service vehicle means a vehicle, used or available for use in a passenger service for the carriage of passengers, that is designed or adapted to carry 12 or fewer persons (including the driver).]

Stretch limousine means a saloon-type motor vehicle that has been modified to increase the standard wheelbase by the insertion of a structure of a significant length whose cross-section conforms to that of the passenger compartment.

UN/ECE is an abbreviation for a regulation of the United Nations Economic Commission for Europe.

Unladen weight means the weight of a vehicle together with the fuel in its fuel system (if any) and the equipment and accessories on it that are necessary for its operation for the purpose for which it was designed.

Vehicle means a contrivance equipped with wheels, tracks or revolving runners upon which it moves or is moved; and includes a hovercraft, a skateboard, in-line skates, and roller skates; but does not include:

- (a) a perambulator or pushchair;
- (b) a shopping or sporting trundler not propelled by mechanical power;
- (c) a wheelbarrow or hand-trolley;
- (d) *Revoked*.
- (e) a pedestrian-controlled lawnmower;
- (f) a pedestrian-controlled agricultural machine not propelled by mechanical power;
- (g) an article of furniture;
- (h) an invalid wheelchair not propelled by mechanical power;
- (i) any other contrivance specified by any other rule not to be a vehicle for the purposes of this definition.

[Vehicle Identification Number (VIN) means a group of letters and numbers consisting of 17 characters that is affixed to the vehicle and that complies with the requirements of one of the following:

- (a) *ISO 3779*; or
- (b) *Australian Design Rule 61/01*; or
- (c) Chapter 565 of the *Code of Federal Regulations 49*.]

[Vehicle inspector has the same meaning as in Part 2 of Land Transport Rule: Vehicle Standards Compliance 2002.]

Vehicle standard means a technical specification with which a motor vehicle, its structure, systems, components or equipment must comply, and which is adopted by:

- (a) the New Zealand Standards Council; or
- (b) any international, national or regional organisation with functions similar to the New Zealand Standards Council.

Weight means:

- (a) in relation to a wheel, an axle, a group of axles, or a vehicle, the weight, or, as the case may be, the sum of the weights, recorded or displayed on a weighing device of a type approved for the purpose by the Minister of Police, by notice in the *Gazette*, and used in a manner prescribed by the Minister of Police, by notice in the "Gazette";
- (b) in relation to the load on a vehicle, the gross weight of the vehicle less its unladen weight.

Part 3

Schedule

Schedule

Vehicle standards referred to in this rule

Australian Design Rule 5/03, Anchorages for Seat belts

Australian Design Rule 59/00, Omnibus rollover strength

Australian Standard 2942-1987, Wheelchair occupant restraint assemblies for motor vehicles

[Australian Standard 2942-1994/Amdt 1-1998: Wheelchair occupant restraint assemblies for motor vehicles]

Australian Standard 3856.1-1991, Hoists and ramps for people with disabilities – Vehicle mounted, Part 1: Product requirements

[Australian Standard/New Zealand Standard 3856.1:1998: Hoists and ramps for people with disabilities-Vehicle-mounted - Product requirements]

Australian Standard 3856.2-1991, Hoists and ramps for people with disabilities – Vehicle mounted, Part 2: Installation requirements

[Australian Standard/New Zealand Standard 3856.2:1998: Hoists and ramps for people with disabilities Vehicle-mounted - Installation requirements]

Australian Standard/New Zealand Standard 4034.1992, Motor Vehicles – Cargo barriers for occupant protection

[Australian Standard 1428.2-1992: Design for access and mobility- Enhanced and additional requirements - Buildings and facilities]

New Zealand Standard 5467.1993, Code of practice for light trailers

UN/ECE Regulation No. 36 Uniform provisions concerning the approval of large passenger service vehicles with regard to their general construction (E/ECE/324-E/ECE/TRANS/505/Rev.1/Add.35/Rev.1/Corr.1)

UN/ECE Regulation No. 52, Uniform provisions concerning the construction of small capacity public service vehicles (E/ECE/324-E/ECE/TRANS/505/Rev.1/Add.51/Rev.1)

UN/ECE Regulation No. 66, Uniform provisions concerning the approval of large passenger service vehicles with regard to the strength of their structure (E/ECE/324-E/ECE/TRANS/505/Rev.1/Add.65)

Publisher's Note

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