



Australian Government

Department of Infrastructure, Transport,
Cities and Regional Development

Road Vehicle Standards

RVSA Implementation Consultation Framework

Concessional RAV Entry Consultation Group

Discussion Paper CR4 – Treatment of Campervans and Motorhomes

3 July 2019

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1. Introduction

The Road Vehicle Standards (RVS) legislation has been passed by both houses of Parliament and the substantive provisions are scheduled to commence on 10 December 2019. In preparation for commencement of the legislation, the Department is currently undertaking policy and procedures development to ensure an effective transition.

The Department has continued to consult with stakeholders and is aware that some industry participants remain concerned about how certain aspects of the legislation will work in practice. The *Road Vehicle Standards Act* (RVSA) Implementation Consultation Framework (the framework) was established as a mechanism to continue to engage with the road vehicle industry and in-service regulators to identify and develop practical solutions to issues relevant to the administration of the RVS legislation.

This paper sets out the proposed requirements the Department is considering applying to model reports covering vehicles that are campervans or motorhomes. It explains why the Department thinks they are necessary and builds on previous discussion to provide clarity around the proposed requirements.


The Department is seeking feedback from stakeholders about the suitability of these proposed requirements.

2. Background

The overriding principle that the Department will apply when setting the requirements for motorhome or campervan construction will be the “permanency” of the modifications. The conversion should be permanent so that the vehicle cannot easily be modified back to the original vehicle. If the Department is not satisfied that the modifications are sufficient, the model report will not be approved.

Campervans and motorhomes are special classes of vehicle that perform a dual purpose of providing transportation and living accommodation. Under the *Motor Vehicle Standards Act 1989* (the MVSA), the Australian Government supplemented Australian Design Rule requirements with a guidance document known as Administrator’s Circular 0-4-12 Certification of Campervans and Motorhomes. For campervans and motorhome supplied under the Registered Automotive Workshops Scheme, this guidance was made law by referring to it as a requirement in the Motor Vehicle Standards Regulations 1989 and the Motor Vehicle Standards (Approval to Place Used Import Plates) Guidelines 2006 (No. 1).

In developing the policy for the *Road Vehicle Standards Act 2018* (the RVSA), the Government considered not providing a pathway for vehicles to be converted into campervans or motorhomes through the specialist and enthusiast vehicles criteria because of significant rorting of the provision under the MVSA that means most vehicles are being supplied as people movers rather than campervans or motorhomes. After consultation on the matter, the Government decided to provide for campervans and motorhomes under Specialist and Enthusiast Vehicle scheme (SEVs) because it did not want to disrupt genuine businesses actually supplying vehicles under these provisions. A requirement of this decision is that the requirements for vehicles that are campervans or motorhomes are difficult to undo.



In considering this issue, the Department recognises that campervan and motorhome requirements are not just about whether the modifications can be undone, but about whether the vehicle is genuinely a campervan or motorhome and whether the resulting vehicle is safe.

3. How do these requirements fit in

Special campervan and motorhome requirements will be incorporated into the Section 89(2) determination relating to standards to apply to vehicles manufactured or modified in accordance with a model report. It is proposed to apply them to SEVs vehicles and vehicles undergoing a second stage of manufacture. As a result, it will apply to vehicles using the model report for a type approval, but it would not apply to other type approved campervans or motorhomes.

Question – Should the requirements apply to second stage of manufacture model reports used under a type approval pathway?

4. Proposed requirements for campervans and motorhomes

The following tables set out the proposed requirement, why it is required and if possible, where the requirement originated.

4.1 Chassis alterations and modifications

Proposed Requirement	Rationale	Source
<p>Where the conversion of a vehicle into a campervan or motorhome requires alterations to the chassis, the design must meet these requirements.</p> <p>Chassis alterations and modifications based on those currently specified in VSB6 – Section H Chassis. For example, it will include requirements for cutting, welding and drilling the chassis to convert vehicles to campervans and motorhomes where no requirements are specified by first stage manufacturer.</p>	<p>The rationale for this requirement is to maintain vehicle structural integrity after chassis modifications. The chassis is the backbone of a vehicle and its main function is to carry the maximum load safely in all designed operating conditions. It absorbs engine and driveline torque, endures shock loading and accommodates twisting on uneven road surfaces. To ensure a modified vehicle chassis remains safe under all operating conditions, any modification must be subject to careful design and rigorous testing.</p> <p>Vehicle safety or performance should not be affected. Modification of a chassis should only be performed after consulting with the vehicle manufacturer or a professional engineer registered with a professional registration body.</p>	VSB6 – Section H – Chassis

Question: Should this requirement be included in addition to any ADR (or any ADR alternative standard) requirements?

Question: Should it apply to both campervans and motorhomes?

4.2 Body alterations or mounting

Proposed Requirement	Rationale	Source
<p>Where the conversion of a vehicle into a campervan or motorhome requires the installation of or alterations to the body, the design must meet these requirements.</p> <p>Body alterations or mounting requirements will be similar to those currently specified in VSB6 – Section J Body Mounting. For example it will provide installation requirements for bodies where no requirements are specified by the original first stage manufacturer.</p> <p>Where body building and mounting instructions are provided by the first stage manufacturer the conversion must comply with those requirements.</p>	<p>The rationale for this requirement is to ensure vehicle structural integrity after a campervan or motorhome body has been installed. Cab chassis manufacturers will issue instructions or recommendations for body building and mounting, (typically called a body builders guide). The vehicle manufacturer's recommendations are to be the primary source for modifications. This requirement is intended for use only when the vehicle manufacturer's recommendations are not provided, not available or applicable to the modification.</p>	<p>VSB6 – Section J – Body Mounting</p>

Question: Should this requirement be included in addition to any ADR (or any ADR alternative standard) requirements?

Question: Should it apply to both campervans and motorhomes?

4.3 Vehicle Rating – Gross Vehicle Mass

Proposed Requirement	Rationale	Source
<p>All motorhomes and campervans must have sufficient carrying capacity to carry the loads in addition to the unladen mass set out below.</p> <p>Where the base vehicle does not have sufficient capacity to hold the loads the GVM may be changed with appropriate modification according to the requirements set out under VSB6 - Vehicle Rating – Section S.</p>	<p>The rationale for this requirement is to control an increase above the original manufacturers GVM rating to allow for some additional payload capacity due to the conversion of the vehicle into a campervan or motorhome. Examples of modifications that might require rating changes include replacing axles or suspension components with differently rated alternatives to cope with expected loads.</p>	<p>Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes.</p>

The motorhome shall have a Gross Vehicle Mass (GVM) appropriate for its purpose, and shall include the following allowances within its laden mass, regardless of the determined Vehicle Category:-

- a Maximum Loaded Vehicle Mass (of a passenger vehicle) as per the Australian Design Rule definitions and vehicle categories, where reference to a “seating position” means a “designated seating position.”
- all supplied equipment such as toilet, refrigerator, shower, gas-bottle etc. including the mass of full fluids/gas. Where waste (grey and black) water tank(s) are provided, their mass may be reduced by the mass of the water stored in any fresh water tank(s).
- a Personal Effects Allowance, to cover cooking utensils, bedding, luggage and other such items, of 60kg for each of the first two sleeping berths, and 20kg for each sleeping berth more than two. This shall be in addition to that included within the Maximum Loaded Vehicle Mass (of a passenger vehicle) above.

Note: This laden mass allowance should be distributed as appropriate to the build of the motorhome as determined by the motorhome manufacturer, but with the Personal Effects Allowance distributed 50/50 per axle group for determining certified Gross Axle Load Rating (GALR).

VS6 – Section S –
Vehicle Rating

Question: Are these requirements sufficient to re-rate the GVM?

4.4 Braking and Stability Test

Proposed Requirement	Rationale	Source
<p>Vehicles must continue to comply with braking requirements for the ADR applicable to the vehicle category of the vehicle after the campervan or motorhome conversion. If the ADR requires ESC testing, the manufacturer may use the following as an alternative to the ADR sine and dwell test.</p> <p>A stability Test similar to the lane change manoeuvre testing requirements of VSB 14 – Lane change manoeuvre testing requirements.</p> <p>Where the cab chassis vehicle was fitted with electronic stability control this test will not be required if the motorhome modification does not exceed the cab chassis manufacturer's recommended loading limits.</p>	<p>As the vehicle's unladen mass will change, the equivalent standard evidence option will not be available.</p> <p>The rationale for this requirement is to ensure the vehicle is safe to operate after significant changes to mass distribution. This testing procedure is applicable to vehicles with a GVM up to 3.5 tonnes and is intended to determine the road holding ability and handling characteristics of a modified vehicle. Testing is usually called for when vehicles are modified in such a way as to cause a significant change in the height of a vehicle's centre of mass, and/or a significant change in the longitudinal centre of mass, such that it affects the way a vehicle handles.</p> <p>Additionally, several coroner's reports in relation to campervans and motorhomes have resulted in findings which have questioned a vehicle's suitability and stability after being converted into a campervan or motorhome.</p>	<p>VSB14 – Lane-change manoeuvre LT1 Test requirements.</p>

Question: Are there other options that should be considered to ensure campervans and motorhomes are safe to operate?

4.5 Vehicle Stiffness

Proposed Requirement	Rationale	Source
Modified vehicles can suffer from reduced stiffness that can result in unsafe vehicle handling characteristics. Campervans built on a unibody that have had the structure altered must pass a beaming and torsion test. It is proposed that the requirements should be similar to VSB14 NCOP12 Section LT Test procedures.	The rationale for this requirement is to maintain vehicle stiffness after a campervan or motorhome body is cut or modified. Modifications to campervans and motorhomes that involve extensions of the wheelbase or removal of the roof can dramatically reduce the strength of the vehicle structure. Subsequent strengthening may result in extra stiffness in certain areas of the chassis but overstressing in others. Consequently, it becomes necessary to demonstrate that the modified vehicle's rigidity is adequate when compared to the original vehicle.	VSB14 LT Test procedures – LT1 Beaming and Torsion Tests.

Question: Is this test suitable for these vehicles?

Question: Are there any other requirements that should be included?

4.6 Designated Seating Positions

Proposed Requirement	Rationale	Source
The number of designated seating positions shall be equal to, or greater than the number of sleeping-berths provided within the motorhome. It is preferable that all designated seating positions are forward or rear facing.	It is more likely that vehicles designed to operate as genuine campervans or motorhomes will remain as campervans or motorhomes. As a result, it is important that they have enough seating positions to carry the number of people that can sleep in them. This provision works with a new requirement for a minimum number of sleeping berths.	Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes.

4.7 Seats, seatbelts and seatbelt anchorages

Proposed Requirement	Rationale	Source
<p>Campervans and motorhomes may be configured to provide a number of designated seating positions in addition to the driver's and front passenger seats. These seats may double in use as seats for dining or recreation and in some cases convert to sleeping-berths. They may also be capable of swivelling to better suit their intended multiple use function.</p> <p>Seats</p> <ul style="list-style-type: none"> It will be a condition of all campervan and motorhome for a durable and permanent label or plaque to be affixed to the motorhome in a readily visible location with the following information in 6mm high lettering:- <p>THIS CAMPERVAN/MOTORHOME IS DESIGNED FOR THE CARRIAGE OF (*) PERSONS</p> <p>{ A seating plan showing all provided seats, with an " X " shown on all seating positions that are NOT designated seating positions }</p> <p>WARNING : THE SEATING POSITION(S) SHOWN BY " X " ON THIS LABEL MUST NOT BE OCCUPIED WHILE THE VEHICLE IS IN MOTION</p> <ul style="list-style-type: none"> A copy of this label/ plaque shall be included within the supplied Owner's Manual. <p>If multiple seating layout variations are to be included within a model range then as appropriate, multiple labels/ plaques shall be provided.</p> <p>All designated seating positions shall fully comply with the requirements of ADR 3/xx, ADR 4/xx and ADR 5/xx.</p>	<p>The rationale for this requirement is to maintain occupant protection whilst the vehicle is in motion on a public road. This requirement requires compliance with ADRs or alternative arrangements to ensure the seat, seatbelt and associate anchorages have sufficient strength to withstand the forces imposed in a collision. Generally, motorhomes will be configured to provide a number of designated seating positions in addition to the driver's and front passenger seats. These seats may double in use as seats for dining or recreation and in some cases convert to sleeping-berths. They may also be capable of swivelling to better suit their intended multiple use function.</p>	<p>Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes</p> <p>VSB 5, 5A and 5B – Manufacture and Installation of Additional Seats</p>

Swivelling seats

If a swivelling-seat is used in a designated seating position, it shall be easily lockable without the use of tools in position(s) as intended for use in transport and ADR compliance must be appropriate to that locked position(s).

It will be a requirement for all campervans and motorhomes that if a swivelling seat is able to be locked in a position other than as certified as a designated seating position, then a durable and permanent label is to be provided in a visible position adjacent to the seat, in 6mm high lettering as follows:-

WARNING : THIS SEAT IS ONLY TO BE USED IN THE (FORWARD/
REARWARD/ etc * - as appropriate) FACING POSITION WHILE THE VEHICLE
IS IN MOTION

- A copy of this label shall also be included within the supplied Owner's Manual.

Question: Should side facing seats be allowed?

Question: Should the number of side facing seats be limited?

Question: Are these requirements sufficient or should additional requirements apply?

4.8 Designated sleeping positions and accommodation

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>The number of designated seating positions shall be equal to, or greater than the number of sleeping-berths provided within the campervan. Sleeping berths can be convert from seats used for other purposes during the day. However, where original designated seating positions are used for the bed base, they must also remain a seating position. Converted beds should be able to comfortably be used by an adult (e.g. cannot be so narrow that a person cannot lie on it comfortably)</p> <p>For motorhomes:</p> <p>Either a double bed with a minimum length of 1,800mm x 1370mm wide or two permanent single beds with minimum length of 1,800mm x 920mm wide each is required to be fitted. Beds must be permanently fixed (base structures bolted, riveted, screwed or welded to the vehicle floor and/or side wall) to the vehicle and an integral part of the living accommodation area.</p> <p>In addition, the number of designated seating positions shall be equal to, or greater than the number of sleeping-berths provided within the motorhome. Additional sleeping berths can be converted from seats used for other purposes during the day. Converted beds should be able to comfortably be used by an adult (e.g., cannot be so narrow that a person cannot lie on it comfortably).</p>	<p>The rationale is that beds and accommodation are key feature of a campervan and motorhome. This requirement is to ensure realistic beds and accommodation are available for use by the occupants and to restrict the reversal of campervan and motorhome conversion.</p>	<p>Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with some additional requirements.</p>

Question: Should specific dimensions be required for beds in campervans and motorhomes?

4.9 Dining table and seats

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>A seating and dining area inside the vehicle, permanently attached to the vehicle. A table may be detachable but should have some permanent means of attachment to the vehicle.</p> <p>For motorhomes:</p> <p>A seating and dining area inside the living accommodation area, permanently attached to the vehicle (bolted, riveted, screwed or welded). The table may be detachable but should have some permanent means of attachment to the vehicle. Permanently secured seating must also be available for use at the table.</p>	<p>The rationale is that a dining table and seating around the table is a key feature of a campervan and motorhome conversion. This requirement is ensuring a suitable dining area is available for use by the occupants and to restrict the reversal of campervan and motorhome conversions.</p>	<p>Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with some refinements</p>

Question: Should any other requirements apply to dining tables and seating?

4.10 Cooking facilities

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>A cooking facility, which maybe either fixed or fitted onto a slide for outside cooking and is powered by gas or electricity. The cooking facility must consist of a two burner stove or a microwave in either case having a fuel/power source. Any gas supply must be separate to the cooking appliance and mounted within a dedicated compartment of the vehicle or secured to the vehicle structure (with the supply pipe also secured).</p>	<p>The rationale is that a cooking facility is a key feature of a campervan conversion. Previously removable/portable BBQ or burners were claimed to meet the cooking facility requirements. This requirement is to ensure that cooking facilities are safe; permanent installed and prevent the reversal of campervan and motorhome conversions.</p>	<p>Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments.</p>

For motorhomes:

A permanently fixed (bolted, riveted, screwed, or welded) cooking facility secured to the vehicle's floor and/or sidewall, powered by gas or electricity that is an integral part of the vehicle living accommodation and is mounted independently of other items. The cooking facility must consist of a minimum of a two burner stove or a microwave in either case having a fuel/power source and a sink and tap suitable for washing up cooking utensils. A sink must be permanently plumbed to the freshwater tank or an external fitting and the drain plumbed to the waste water tank.

If the cooking facility is fuelled by gas having a remote fuel supply, the fuel supply pipe must be permanently secured to the vehicle structure. If the cooking facility is fuelled by gas having a remote fuel supply, the fuel reservoir must be secured in a storage cupboard or the reservoir.

Question: What additional requirements for cooking facilities should be included?

4.11 LPG requirements

Proposed Requirement	Rationale	Source
<p>A certificate of compliance issued by a licensed gas fitter in one of the states or territories will be a critical component requirement in the model report.</p> <p>Additionally, the model report evidence must include that a licensed gas installer approves the gas layout design.</p>	<p>The rationale is that an LPG system is issued with a certificate of compliance with a suitable LPG standard. Additionally this removes an issue that the Senate Standing Committee on Regulations and Ordinances in relation to the referencing external standards.</p>	<p>Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes.</p>

Question: Is this proposal an acceptable solution for LPG requirements?

4.12 Headroom

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>Generous headroom (height) within the living accommodation area in comparison to that within the driving cabin typically achieved via a higher roofline (including extendable roof top) and in some cases a lower floor level. This will facilitate standing or ease of movement. Note that an extendable roof top must be internal to the vehicle, i.e. cannot be a structure placed entirely outside of the vehicle such as a pop-up tent situated on the roof of the vehicle.</p> <ul style="list-style-type: none"> • some campervans may not have such generous or substantially different head room within the living accommodation area, whereas all motorhomes should. • A minimum headroom height of 1,350mm is required for a campervan in the living space. <p>For motorhomes:</p> <ul style="list-style-type: none"> • As per the requirements above with the exception that the minimum headroom height of 1,800mm applied to motorhomes. 	<p>The rationale is that headroom is a key feature of a campervan and motorhome conversion. This requirement is to ensure there is sufficient headroom available for use by the occupants and to restrict the reversal of campervan and motorhome conversions</p>	<p>Based on ADR 58/00 requirements for headroom.</p>

Question: Are the proposed headroom height requirements sufficient?

4.13 Storage facilities

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>A cupboard or locker for items such as food, clothes, linen and cookware must provide a dedicated and permanent storage facility. The storage facilities must also meet a minimum volumetric storage capacity of 0.7 m³ for the first two sleeping berths and 0.2 m³ for each subsequent berth.</p> <p>The storage facility must be an integral part of the vehicle living accommodation, i.e. mounted independently of other items, unless incorporated below:</p> <ul style="list-style-type: none"> • Seat/sleeping accommodation or the cooking facility. • The storage facility must be a permanent feature, (bolted, riveted, screwed or welded). • The storage must include features that prevent unintended opening of cabinet doors to ensure contents remain stowed securely while in motion. • The storage facility must be secured directly to the vehicle floor and/or sidewall; unless a storage provision is provided over the driver's cab compartment. <p>For motorhomes:</p> <p>Dedicated and permanent storage areas including a cupboard or locker for items such as food, clothes, linen and cookware must be provided. The storage facilities must also meet a minimum volumetric storage capacity of</p>	<p>The rationale is that storage is a key feature of a campervan and motorhome conversion. This requirement is to ensure there is sufficient storage available for use by the occupants and to restrict the reversal of campervan and motorhome conversions</p>	<p>Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments</p>

1.4 m³ for the first two sleeping berths and 0.4 m³ for each subsequent berth.

The storage facility must be an separate part of the vehicle living accommodation, i.e. mounted independently of other items, unless incorporated below:

- seat/sleeping accommodation or the cooking facility.
- The storage facility must be a permanent feature, (bolted, riveted, screwed or welded).
- The storage must include features that prevent unintended opening of cabinet doors to ensure contents remain stowed securely while in motion.
- The storage facility must be secured directly to the vehicle floor and/or side wall; unless a storage provision is provided over the driver's cab compartment

Question: Is a volumetric requirement suitable for assessing the adequacy of storage facilities in campervans and motorhomes?

4.14 Glazing material

Proposed Requirement	Rationale	Source
All glazing located in the travelling compartment must comply with ADR 8/xx. Glazing, which is not located, in the travelling compartment must be appropriate for domestic use	The rationale is glazing has adequate visibility under normal operating conditions, will minimise obscuration when shattered, and will minimise the likelihood of serious injury if a person comes in contact with the broken glazing material.	Carried over from Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments

4.15 Electrical Installations and connections

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>An additional inbuilt power supply (typically deep cycle batteries) for powering on-board facilities when not connected to external AC power supply.</p> <p>The ability to connect an external AC power supply to power various on-board facilities via in-built rectifier / adapter while stationary, such as air conditioning, cooking, refrigeration, television.</p> <p>Electrical installations intended for connection to a power system other than that of the vehicle. AC power connections issued with a certificate of compliance by a licensed electrician in at least one of the states or territory will be deemed a critical component in the model report</p>	The rationale is that an this will allow campervans and motorhomes to be used effectively. An electrical system issued with a certificate of compliance to a suitable electrical standard will be deemed acceptable. Additionally this will remove concerns from the Senate Standing Committee on Regulations and Ordinances about referencing external standards.	Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments

requirements and will be deemed to have meet campervan and motorhome requirements.

For motorhomes:

An additional inbuilt power supply (typically deep cycle batteries) for powering on-board facilities when not connected to external AC power supply.

The ability to connect an external AC power supply to power various on-board facilities via in-built rectifier / adapter while stationary, such as air conditioning, cooking, refrigeration, television (typically in a motorhome only). AC power connections issued with a certificate of compliance by a licensed electrician in at least one of the states or territory will be deemed a critical component in the model report requirements and will be deemed to have meet campervan and motorhome requirements. Inbuilt power supply (typically deep cycle batteries) additional to that used for vehicle running

Question: Is this proposal an acceptable solution for electrical standards?

4.16 Door

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>Campervans must be fitted with at least one door located on the left-hand side or rear of the vehicle. A left-hand front passenger door of a vehicle may be used as a single access point if measured and shown with the aisle gauge to allow that there are no impediments to entry.</p>	<p>The rationale of a door on the left-hand side or rear is that it must be able to function as a door, in the normal sense of the word, providing direct entry to and egress from the vehicle. Whilst there are no specific dimensions, the intent is to enable an average size person to easily enter and exit the vehicle without additional external fixtures or fittings. In</p>	<p>Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments</p>

The door must be an outward opening or sliding door that provides access directly to living or sleeping accommodation.

All additional side doors which have been added as a result of the campervan or motorhome conversion must be hinged from the front.

For motorhomes:

All motorhomes must be fitted with an outward opening or sliding door that provides access directly to living or sleeping accommodation. At least one such door shall be located on the left-hand side or rear (a left-hand front passenger door of a vehicle may be used as a single access point if tested with an aisle gauge and shown that there are no impediments).

The intent of a door on the left-hand side or rear is that it must be able to function as a door, in the normal sense of the word, providing direct entry to and egress from the vehicle. Whilst there is no specific dimension, the intent is clearly to enable an average size person to easily enter and exit the vehicle without additional external fixtures or fittings. In addition, there must be no impediments (such as fixed objects) which interfere in any way with the easy use of doors for entry and exit.

All additional side doors which have been added as a result of the campervan or motorhome conversion must be hinged from the front.

Access doors shall not open inwards except that this requirement shall not apply to the doors commonly known as a “jack-knife door”, or a “glide-away door”, provided that the door is fitted with an emergency exit release and constructed so that it cannot protrude into the motorhome further than the steps provided at the access point. No access door shall be provided with an internal fitting designed to cover internal steps when such door is closed

addition, there must be no impediments (such as fixed objects) which interfere in any way with the easy use of doors for entry and exit.

Question: Should the standard include dimensional requirements for doors?

4.17 Access

Proposed Requirement	Rationale	Source
Where the main access passage is via the first stage manufacturer's left-hand front door only, access between the left-hand front door aperture and passenger 'Seats' and the living accommodation area must be assessed with the use of the 'aisle gauge'. The 'aisle gauge' shall pass through the access route perpendicular to the direction of travel to ensure sufficient access. The right-hand front door is not an access point.	The rationale is that access is a key feature of a campervan and motorhome conversion. This requirement is to ensure that access to and from the vehicle is not impeded, particularly where exiting the vehicle in an emergency.	Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments and ADR 58.

4.18 Fire extinguishers

Proposed Requirement	Rationale	Source
Campervans and motorhomes shall be provided with at least one fire extinguisher of not less than 4.5 litres capacity in the living compartment. If the vehicle has a partitioned living compartment, then fire extinguishers must be fitted in each area. The living compartment does not include bathroom or storage compartments. A fire extinguisher must be suitable to extinguish the expected fire types and materials in that space.	The rationale is that if a fire extinguisher is available and suitable to quell a fire and allow the occupants to escape danger. Additionally this removes an issue that the Senate Standing Committee on Regulations and Ordinances in relation to the referencing external standards	Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments

4.19 Water Storage

Proposed Requirement	Rationale	Source
<p>For campervans:</p> <p>Water storage tank/s (potable water) may be fixed or removable storage containers. Water storage must have a permanent location and a capacity of at least 10 litres per designated seating position.</p> <p>For motorhomes:</p> <p>Water storage tank/s (potable water) and wastewater tank/s must be fitted. Water storage fixed on, or in, the vehicle must have a capacity of 20 litres per designated seating position.</p>	<p>The rationale is that water storage is a key feature of a campervan and motorhome conversion. This requirement is to ensure there is sufficient water storage available for use by the occupants and to restrict the reversal of campervan and motorhome conversions</p>	<p>Administrator Circular 0-4-12 Certification of Campervans and Motorhomes with amendments</p>

Question: Is this capacity requirement suitable for campervans and motorhomes?

4.20 Refrigeration Facilities

Proposed Requirement	Rationale	Source
<p>For motorhomes:</p> <p>Must be fitted with a refrigeration facility that is permanently secured to a floor and/or wall in a motorhome.</p>	<p>The rationale is that refrigeration facility is a key feature of a motorhome conversion. This requirement is to ensure there is a refrigeration facility available for use by the occupants and to restrict the reversal of motorhome conversions</p>	<p>Nil</p>

4.21 Floors

Proposed Requirement	Rationale	Source
Floors of a motorhome shall be finished and maintained with a skid-resistant surface and shall be of sound construction and sealed to prevent fumes from the engine and dust from the roadway from entering the interior of the vehicle.	The rationale is that floor surface is suitable and provides a suitable surface to walk on and does not allow fumes to enter the cabin or living space. This requirement is to ensure occupant safety against slips and falls as well hazards relating to the inhalation of exhaust fumes.	ADR 58/00

Question: Should floors be required to be flat?

4.22 Toilets, Sinks and Showers

Proposed Requirement	Rationale	Source
Motorhomes must be equipped with a toilet, sink and a shower.	The rationale is that motorhomes have the same features as a house.	ADR 42/04

Question: Should any additional requirements relating to toilets, sinks and showers be included?

4.23 Permanency of modifications for campervans and motorhomes

Proposed Requirement	Rationale	Source
<p>Where original equipment is removed from the vehicle to convert it into a campervan or motorhome, those components must be destroyed so that they are unable to be re-installed or re-used. For example, if a seating position is deleted as part of the conversion, the seat belt and seat must be destroyed in a way that makes it impossible to re-use these components. In addition, the seat anchorages and seat belt anchorage threads or equivalent must be drilled out and sealed so that it is impossible to reuse these anchorages.</p> <p>Where the OEM seating is retained those seats must remain as a designated seating positions after the campervan or motorhome conversion has been completed.</p>	<p>The Department recognizes that most modifications are able to be undone and is proposing these requirements to reduce unmodification.</p> <p>Drilling out seatbelt anchorages is likely to make it more difficult to turn a campervan back into a people mover but may result in an unintended consequence of encouraging modifications that are less safe. .</p>	Nil

Question: Will this proposed requirement ensure the permanency of campervan and motorhome modifications?