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Performance Based Standards (PBS) Vehicle Standard Operating Conditions

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D24#162335
August 2024

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Document Control

Owner	Main Roads Heavy Vehicle Services
Custodian	Manager Heavy Vehicle Road Network Access
Document Number	D24#162335
Issue Date	31 January 2024
Review Frequency	As required.

Amendments

Revision Number	Revision Date	Description of Key Changes	Section
1	5/02/2024	Added mass table to Concessional Mass Limits within definition table.	Def.
2	8/02/2024	Updated clause 3.3 title to include (applies to IAP only)	s. 3
3	01/07/2024	Added RAV Warning Sign requirements.	s.17, Appendix 1 - 4.
4	01/08/2024	Clarify RAV Warning Sign requirements.	s.17, Appendix 1 - 4.

DEFINITIONS

The following are definitions for terms used in these Operating Conditions. Refer to the definitions in the *Road Traffic (Administration) Act 2008* and the *Road Traffic (Vehicles) Act 2012* and any subsidiary legislation to these Acts for the meanings of any terms not defined in this section. If a definition in the relevant Acts or the subsidiary legislation conflicts with a definition in this section, the definition in this section prevails for the purpose of these Operating Conditions.

Term	Definition																
Approved Network	An approved network specified in the permit, which is published in the RAV Mapping Tool on the Main Roads website.																
Certification Approval	The WA Performance Based Standards (PBS) Certification Approval, issued by Main Roads Heavy Vehicle Services and attached to the permit.																
Concessional Mass Limits	Approved mass limits that exceed statutory mass limits, as specified in the table below. <table border="1" data-bbox="512 840 1422 1113"> <thead> <tr> <th>Concessional Level</th> <th>Tandem Axle Groups</th> <th>Tri Axle Groups</th> <th>Quad Axle Groups</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>17t</td> <td>21.5t</td> <td>24t</td> </tr> <tr> <td>2</td> <td>17t</td> <td>22.5t</td> <td>27t</td> </tr> <tr> <td>3</td> <td>17.5t</td> <td>23.5t</td> <td>28.5t</td> </tr> </tbody> </table>	Concessional Level	Tandem Axle Groups	Tri Axle Groups	Quad Axle Groups	1	17t	21.5t	24t	2	17t	22.5t	27t	3	17.5t	23.5t	28.5t
Concessional Level	Tandem Axle Groups	Tri Axle Groups	Quad Axle Groups														
1	17t	21.5t	24t														
2	17t	22.5t	27t														
3	17.5t	23.5t	28.5t														
Design Approval	The <i>WA Performance Based Standards (PBS) Scheme Vehicle Design Approval</i> , issued by Main Roads Heavy Vehicle Services and attached to the permit.																
Level 2 RAV	A RAV within 27.5 metres in length and meeting the Level 2 <i>Performance Based Standards (PBS) Scheme</i> performance standards.																
Level 2B RAV	A RAV exceeding 27.5 metres in length and meeting the Level 2 <i>Performance Based Standards (PBS) Scheme</i> performance standards.																
Level 3 RAV	A RAV within 36.5 metres in length and meeting the Level 3 <i>Performance Based Standards (PBS) Scheme</i> performance standards.																
Level 3B RAV	A RAV exceeding 36.5 metres in length and meeting the Level 3 <i>Performance Based Standards (PBS) Scheme</i> performance standards.																
Level 4 RAV	A RAV within 53.5 metres in length and meeting the Level 4 <i>Performance Based Standards (PBS) Scheme</i> performance standards.																
Level 4B RAV	A RAV exceeding 53.5 metres in length and meeting the Level 4 <i>Performance Based Standards (PBS) Scheme</i> performance standards.																
Main Roads Website	www.mainroads.wa.gov.au																

Term	Definition
Master Design Sub-Permit	<p>Means one of the following permits issued under Part 4 of the <i>Road Traffic (Vehicles) Act 2012</i>, which these Operating Conditions form part of:</p> <ul style="list-style-type: none"> - National PBS Level X – Master Design Sub-Permit - WA PBS Level X – Master Design Sub-Permit <p>Where “X” refers to the relevant PBS Level.</p>
NHVR	National Heavy Vehicle Regulator
Non-complying Vehicle	A vehicle that does not comply with the vehicle standards and/or dimension requirements prescribed in the <i>Road Traffic (Vehicles) Regulations 2014</i> .
Performance Based Standards (PBS) Scheme Permit	<p>Means one of the following permits issued under Part 4 of the <i>Road Traffic (Vehicles) Act 2012</i>, which these Operating Conditions form part of:</p> <ul style="list-style-type: none"> - National PBS Level X – Master Design Sub-Permit - National PBS Level X – Period Permit - National PBS Towing Vehicle – Period Permit - WA PBS Level X – Master Design Sub-Permit - WA PBS Level X – Period Permit - WA PBS Towing Vehicle – Period Permit <p>Where “X” refers to the relevant PBS Level.</p>
Permit	Means a permit issued under Part 4 of the <i>Road Traffic (Vehicles) Act 2012</i> , which these Operating Conditions form part of.
Permit Holder	The Operator to whom the permit is issued.
Posted Speed Limit	The speed limit indicated by the numerals on the speed limit sign or 50 kilometres per hour in the absence of a speed limit sign in a built-up area.
Prime Mover	A motor vehicle built primarily to tow a semi-trailer but does not include a truck or modified prime mover built primarily to carry a load or carry out a function other than towing a semi-trailer.
RAV	An approved vehicle combination to which the <i>Performance Based Standards (PBS) Permit</i> applies.
Statutory Dimension Limits	The dimension limits prescribed in Part 8 and Part 10 of the <i>Road Traffic (Vehicles) Regulations 2014</i> .
Statutory Mass Limits	The mass limits prescribed in Part 8 of the <i>Road Traffic (Vehicles) Regulations 2014</i> .
Towing Vehicle Permit	<p>Means one of the following permits issued under Part 4 of the <i>Road Traffic (Vehicles) Act 2012</i>, which these Operating Conditions form part of:</p> <ul style="list-style-type: none"> - National PBS Towing Vehicle – Period Permit - WA PBS Towing Vehicle – Period Permit <p>Where “X” refers to the relevant PBS Level.</p>

Term	Definition
Truck	A motor vehicle designed primarily for the carriage of goods directly upon it, and does not include a prime mover, unless it is fitted with a block for use as a block truck, or has been modified to the extent where its primary function is no longer to tow a semi-trailer.
Vehicle Approval	The <i>National Performance Based Standards (PBS) Scheme Vehicle Approval</i> , issued by the NHVR and attached to the permit.

1 APPLICATION

1.1 Approved Vehicles

- 1.1.1** A *Performance Based Standards (PBS) Scheme Permit* applies to the RAV specified on the permit that has been approved under the WA Performance Based Standards (PBS) Scheme or the National Performance Based Standards Scheme.
- 1.1.2** A *Performance Based Standards (PBS) Scheme Permit* also applies to a lesser RAV configuration that is being operated on the approved roads specified in the permit. For the purpose of this condition, a lesser RAV configuration is one that results from disconnecting the rear trailer(s), e.g. converting an A-Quad to an A-Triple, or an A-Triple to an A-Double.

1.2 Operating in Conjunction with another Permit or Order

- 1.2.1** A *Performance Based Standards (PBS) Scheme Permit* cannot be used in conjunction with another permit or order, unless specified in this clause.
- 1.2.2** A *Master Design Sub-Permit* must be used in conjunction with an applicable *Towing Vehicle Permit*.

2 COMPULSORY WA HEAVY VEHICLE ACCREDITATION

2.1 Operating at Statutory Mass Limits

The Permit Holder must be accredited under the WA Heavy Vehicle Accreditation Scheme (WAHVAS), including the Fatigue Management Module, Maintenance Management Module and Dimension & Loading Management Module.

2.2 Operating at Concessional Mass Limits

When operating at Concessional Mass Limits, the Permit Holder must be accredited under the WA Heavy Vehicle Accreditation Scheme (WAHVAS) Mass Management Module, in addition to the modules specified under clause 2.1.

3 TELEMATICS MONITORING REQUIREMENTS

3.1 Mandatory Telematics Monitoring

- 3.1.1** A RAV must be monitored under the Intelligent Access Program (IAP) or the Telematics Monitoring Application PBS WA (TMAPBSWA) by a Service Provider who is certified by Transport Certification Australia (TCA) and has an executed Approved Service Provider Operator Agreement.
- 3.1.2** When operating under the *Performance Based Standards (PBS) Scheme Permit*, the Permit Holder is required to inform the driver that the vehicle is being monitored for the purposes of compliance by Main Roads WA.

3.2 Malfunctions, Tampering and Calibration

- 3.2.1** This permit may be suspended or cancelled if:
- (a) The driver or Permit Holder tampers with or manipulates the in-vehicle telematics device;
or
 - (b) The driver or Permit Holder fails to report a malfunction with the in-vehicle telematics device.

- 3.2.2** An in-vehicle telematics device malfunctions if:
- (a) It ceases to work at all, or works only intermittently; or
 - (b) It performs a function in such a way that the results of it doing so are inaccurate or unreliable (including intermittently inaccurate or unreliable).
- 3.2.3** A person tampers with or manipulates an in-vehicle telematics device if he or she engages in conduct that has the result that:
- (a) The device or system is altered; or
 - (b) The device or system is installed or used in a way that is not in accordance with the conditions of its approval by Main Roads WA; and
 - (c) The device or system does not perform as intended in terms of accuracy, timeliness, reliability, verifiability or any other performance parameter.

3.3 Driver Declaration (applies to IAP only)

- 3.3.1** At the beginning of each journey, the driver must enter the following details into the vehicle's Self Declaration Input Device (SDID):
- (a) The vehicle category, e.g. A-double, A-Triple or A-Quad.
 - (b) The number of axles.
 - (c) The load type.
 - (d) The total combination mass.
- 3.3.2** At the beginning of each journey, the driver must enter the comment "On permit" followed by the permit number into the SDID.
- 3.3.3** At the end of each journey, the driver must enter the comment "Off permit" followed by the permit number into the SDID. If the permit applies to empty return travel, the end of the journey shall be once the return travel is complete.
- 3.3.4** Alternatively, where the SDID is not functioning, the "on/off" comments must be entered into the web portal, within 72 hours of completing the journey.

4 COMMERCIAL GOODS VEHICLE LICENCE

4.1 Obtaining a CGVL

Each RAV must obtain a Commercial Goods Vehicle Licence (CGVL), in accordance with the *Transport Co-ordination Act 1966*, when carrying iron ore, or any mining product from which iron is to be extracted, if sourced from a mine or mine stockpile situated:

- (a) Within 100km of Geraldton, Marchagee, Pindar, South Mine 94 or Wubin; or
- (b) Within 100km on either side of:
 - i. The railway between Geraldton and Wubin, including the section of railway between Mullewa and Pindar; or
 - ii. The railway between Geraldton and Marchagee; or
 - iii. The railway between Dongara and South Mine 94.

Note: *to obtain a CGVL, the operator must contact the Department of Transport Freight, Ports, Aviation and Reform Section via cgv1@transport.wa.gov.au. For more information, see the Commercial Goods Vehicle Licence page on the Department of Transport website: [Commercial goods vehicle licence \(CGVL\) \(transport.wa.gov.au\)](https://www.transport.wa.gov.au/commercial-goods-vehicle-licence).*

4.2 Complying with CGVL Conditions

The driver and permit holder must comply with the conditions specified in the CGVL.

4.3 Carrying a Copy of the CGVL

A copy of the CGVL must be carried in the RAV and presented to WA Police or Main Roads personnel upon request.

5 USING A NON-COMPLYING VEHICLE

5.1 Accepted Non-Complying Vehicles

- 5.1.1 A semi-trailer with a non-complying length may be used, provided a modified length limit is specified in the relevant Design Approval or Vehicle Approval.
- 5.1.2 A semi-trailer with a non-complying tow coupling underrun may be used, provided a modified length limit is specified in the relevant Design Approval or Vehicle Approval.
- 5.1.3 A dolly with a non-complying drawbar coupling height may be used, provided a modified length limit is specified in the relevant Design Approval or Vehicle Approval.
- 5.1.4 A dolly with a non-complying drawbar length may be used, provided a modified length limit is specified in the relevant Design Approval or Vehicle Approval.

6 VEHICLE MAINTENANCE REQUIREMENTS

Each vehicle forming part of the RAV must be maintained in such a manner to ensure that the physical characteristics are not modified from those stated in the *WA Performance Based Standards (PBS) – Vehicle Specifications (Part B)*, referenced in the Design Approval or applicable to the Vehicle Approval.

7 TOW COUPLING REQUIREMENTS

7.1 Minimum D-Rating Requirements

The RAV must be fitted with tow couplings meeting the minimum D-rating requirements specified in the Design Approval or Vehicle Approval.

Note: A [D-rating Calculator](#) is available on the Main Roads website.

7.2 Maximum Lash Requirements

Where specified in the Design Approval or Vehicle Approval, the RAV must be fitted with tow couplings meeting the maximum lash requirements.

7.3 Coupling Offset

- 7.3.1 The fifth wheel or ball race must be positioned on the prime mover or dolly within the offset specified on the Design Approval or Vehicle Approval.
- 7.3.2 Where no coupling offset requirement is specified, the fifth wheel or ball race must be positioned in the centre of the prime mover's drive axle group or the centre of the dolly's axle group.

8 TYRE REQUIREMENTS

The RAV must be fitted with tyres meeting the size and minimum load index requirements specified in the Design Approval or Vehicle Approval.

9 ELECTRONIC BRAKING SYSTEM REQUIREMENTS

9.1 Combination Requirements

All vehicles must be fitted with and have a functioning Electronic Braking System (EBS) wiring network to support CAN communications across the entire combination, with adequate power to support the Trailer Electronic Braking System (TEBS) of all trailers and dollies in the combination.

9.2 Prime Mover Requirements

9.2.1 The prime mover and rigid trucks must be fitted with an Antilock Braking System (ABS) or an Electronic Braking System (EBS).

9.2.2 All prime movers and rigid trucks must supply a CAN / TEBS brake application signal.

9.3 Trailer Requirements

9.3.1 All semi-trailers and fixed dog trailers must be fitted with TEBS, with a fully functional Rollover Stability System (RSS) and a compatible CAN connection linking all units in the combination.

9.3.2 If dollies are not fitted with TEBS, the EBS cabling can bypass the dolly and directly connect semi-trailer to semi-trailer.

9.3.3 The braking systems must be maintained to ensure voltage drop does not negatively affect the EBS functionality.

9.3.4 The EBS and RSS must be maintained and fully functional when the vehicle combination is in operation.

9.4 End of Line Testing

The Permit Holder must conduct an End of Line (EOL) test of the braking system at least once every 6 months and retain an auditable record of the test.

10 TRAILER CONFIGURATION REQUIREMENTS

Only trailers specified in the Certification Approval or Vehicle Approval must be used and the trailers must only be connected in the position specified in the Certification Approval or Vehicle Approval.

11 DIMENSION REQUIREMENTS

11.1 Dimension Limits

11.1.1 A RAV must not exceed a dimension limit specified on the Design Approval or Vehicle Approval.

11.1.2 Where a dimension limit is not specified on the Design Approval or Vehicle Approval, the RAV must comply with the relevant statutory dimension limit.

11.2 Multiple Height Limits

11.2.1 Where multiple payload height limits are specified in the Design Approval or Vehicle Approval, a Payload Management Procedure must be included within the Permit Holder’s current Western Australian Heavy Vehicle Accreditation Load Management System and/or Mass Management System that appropriately manages the different payload heights.

12 AXLE CONFIGURATION AND SPACINGS

12.1 Dual Tyre Requirement

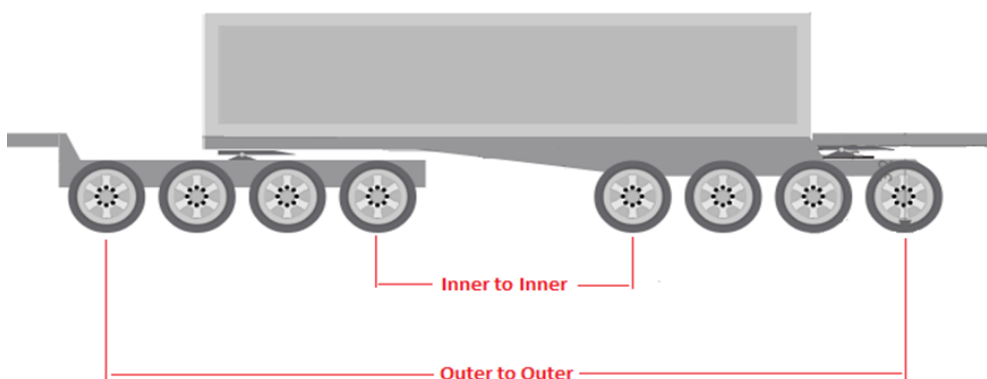
Unless otherwise specified on the *Performance Based Standards (PBS) Scheme Permit*, all axle groups of the RAV, except the steer axles, must be fitted with dual tyres.

12.2 Axle Spacing Requirements

Unless otherwise specified on the *Performance Based Standards (PBS) Scheme Permit*, the RAV must comply with the minimum axle spacing requirements specified in the following table:

Adjacent Axle Groups	Minimum Outer to Outer Axle Spacing	Minimum Inner to Inner Axle Spacing	Maximum Mass Permitted
Tandem to Tandem Axle Groups	6.8 metres	3.4 metres	17.5t on Tandem Groups
Tandem to Tri Axle Groups	8.0 metres		17.5t on Tandem Groups and 23.5t on Tri Groups
Tandem to Quad Axle Groups	9.2 metres		17.5t on Tandem Groups and 28.5t on Quad Groups
Tri to Tri Axle Groups	9.2 metres		23.5t on Tri Groups
Tri to Quad Axle Groups	10 metres		20t on Tri Groups and 24t on Quad Groups
Tri to Quad Axle Groups	11 metres		23.5t on Tri Groups and 28.5t on Quad Groups
Quad to Quad Axle Groups	12 metres		27t on Quad Groups
Quad to Quad Axle Groups	12.5 metres		28.5t on Quad Groups

Axle spacings are measured as shown in the following diagram:



“Single Axle” does not include a single steer axle.

“Tandem axle group” does not include a twin steer axle group.

12.3 Quad Axle Group Requirements

12.3.1 All axles in a quad-axle group must relate to each other through a load-sharing suspension system.

12.3.2 A quad-axle group must be fitted with either:

- (a) A steerable axle with no less than 12 degrees of steering articulation and an effective automatic centring mechanism; or
- (b) Another steering mechanism proven to be effective in mitigating the impacts of road scrubbing by tyres.

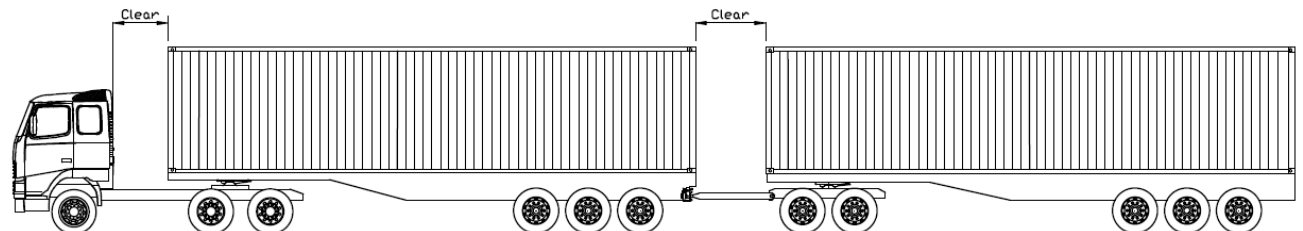
12.3.3 The steerable axle in each quad axle trailer and quad axle dolly must be locked when operating at a speed greater than 30 km/h. This locking mechanism must be automatic and not require intervention from the driver. When the vehicle combination turns at an intersection, the steerable axle on each quad axle group must be automatically unlocked to minimise pavement wear.

13 TRAILER GAP REQUIREMENTS

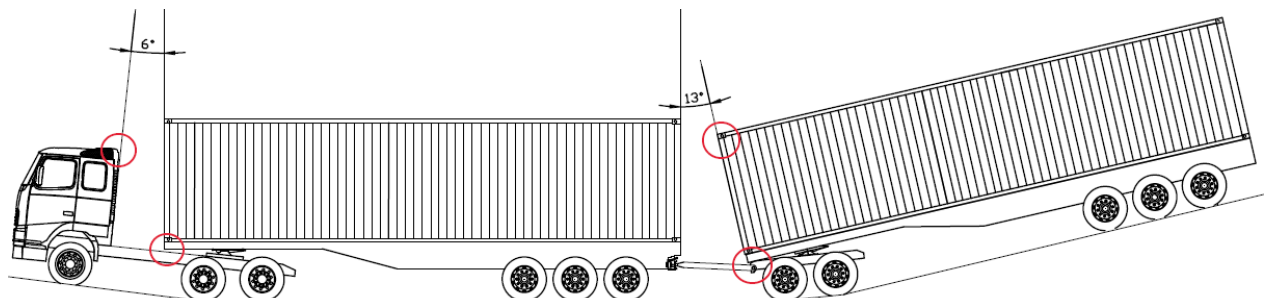
13.1.1 The RAV must be able to achieve the following angles of rotation simultaneously and independently, without any part of the trailer contacting any part of the towing vehicle (i.e. prime mover, lead semi-trailer or converter dolly), including the load:

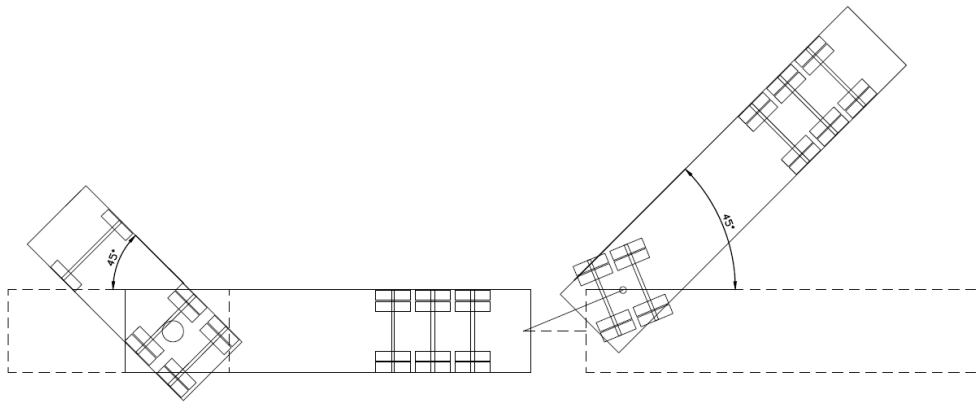
- (a) Articulation – 45° left and right;
- (b) Pitch – 6° forward and 7° rearward;
- (c) Roll – as provided by the coupling.

13.1.2 There must be sufficient clear gap, as per the below example to achieve the specified angles of rotation:



13.1.3 The clear gap must be sufficient to enable the trailers to move through all the specified angles of rotation without contacting any other part of the towing vehicles, as per the following two diagrams. The red circles indicate the potential fouling zones.





Note: The [Trailer Clearance Calculator](#) is available on the [Permits and Orders](#) page on the [Main Roads website](#).

14 MASS REQUIREMENTS

14.1 Manufacturers' Ratings

The mass on the RAV or any of its components must not exceed the manufacturer's rating.

14.2 Drive Axle Group and Trailer Axle Group Mass Requirements

14.2.1 A RAV must not exceed the axle group mass limits specified in the Design Approval or Vehicle Approval.

14.2.2 A RAV must not exceed the total combination mass limit (or gross mass limit) specified in the Design Approval or Vehicle Approval.

14.3 Multiple Mass Limits

Where multiple mass limits are specified in the Design Approval or Vehicle Approval, a Payload Management Procedure must be included within the Permit Holder's current Western Australian Heavy Vehicle Accreditation Load Management System and/or Mass Management System that appropriately manages the different mass limits.

14.4 Approved Steer Axle Mass Requirements

Unless a lesser mass limit is specified in the Design Approval or Vehicle Approval, a RAV may exceed the statutory mass limit relating to the steer axle(s), up to the maximum mass limits specified below:

Axle Group	Mass Limit
Single Steer Axle with tyres <375 mm	6.5 t
Single Steer Axle with tyres ≥375 mm	7.1 t
Twin Steer Axle Group with non-load sharing suspension	10 t
Twin Steer Axle Group with load sharing suspension and tyres <375 mm	11 t
Twin Steer Axle Group with load sharing suspension and tyres ≥375 mm	12 t

14.5 Minimum Drive Axle Mass

Where specified in the Design Approval or Vehicle Approval, a RAV must comply with the minimum drive axle mass requirement.

14.6 Towed Mass Ratio

- 14.6.1** When a RAV is laden, the total axle group mass of a trailer must not exceed the total axle group mass of the towing vehicle.
- 14.6.2** For the purpose of this clause, the towing vehicle is:
- (a) For the lead semi-trailer, the prime mover; or
 - (b) For a B-trailer or pig trailer, the semi-trailer directly in front; or
 - (c) For the first dog trailer, the prime mover and lead semi-trailer combined; or
 - (d) For another dog trailer, the dog trailer or B-double section (i.e., A-trailer and semi-trailer combined) directly in front.

15 ACCESS REQUIREMENTS

15.1 Approved Roads and Conditions

- 15.1.1** A RAV must only be driven on:
- (a) A road listed under “Approved Road List” in the *Performance Based Standards (PBS) Scheme Permit*, or
 - (b) A road listed in an Approved Network specified in the *Performance Based Standards (PBS) Scheme Permit*, or
 - (c) A road listed in an endorsement attached to the *Performance Based Standards (PBS) Scheme Permit*.
- 15.1.2** A RAV must be operated in accordance with any conditions specified for a particular road.
- 15.1.3** The route must be fully investigated by the driver or operator to ensure that the route is suitable for travel and no damage to property or undue obstruction to other vehicles will occur from the movement.

15.2 Greenmount Hill Access

If approved to operate on Great Eastern Hwy, Greenmount Hill, a Level 2 RAV must be operated in accordance with the following conditions:

- (a) The prime mover must be fitted with an engine that meets the emission standards specified in the Vehicle Standard (Australian Design Rule 80/3 – Emission Control for Heavy Vehicles) 2006 (equivalent to Euro 5 Standards).
- (b) The prime mover must be fitted with a driver fatigue and distraction monitoring system, with appropriate governance in place to ensure events are managed effectively.
- (c) The prime mover must be enrolled under the Hill Descent Monitoring (HDM) Scheme with a Transport Certification Australia (TCA) Certified Service Provider to ensure all vehicles stop in the mandatory stopping bay at the top of Greenmount Hill to check brakes, then descend in the appropriate low gear at a speed of no more than 40km/h.
- (d) The prime mover must be fitted with and utilise an auxiliary braking system when descending Greenmount Hill. Drivers must be familiar with the operation of the particular auxiliary braking system, with training records provided to HVS.
- (e) At least one forward-facing camera and one rear-facing camera must be mounted on the prime mover and must operate in accordance with the Restricted Access Vehicle Video Recording Requirements. The rear-facing camera must be positioned on the driver's side of the prime mover.

15.3 Lesmurdie Hill Access

If approved to operate on Welshpool Road East, Lesmurdie Hill, a RAV must be operated in accordance with the following conditions:

- (a) The vehicle combination must be fitted with disc brakes on all axles.
- (b) The prime mover must be fitted with an engine that meets the emission standards specified in the Vehicle Standard (Australian Design Rule 80/3 – Emission Control for Heavy Vehicles) 2006 (equivalent to Euro 5 Standards).
- (c) The prime mover must be enrolled under the Hill Descent Monitoring (HDM) Scheme with a Transport Certification Australia (TCA) Certified Service Provider to ensure all vehicles stop in the mandatory stopping bay at the top of Lesmurdie Hill to check brakes, then descend in the appropriate low gear at a speed of no more than 40km/h.
- (d) The prime mover must be fitted with and utilise an auxiliary braking system when descending Lesmurdie Hill. Drivers must be familiar with the operation of the particular auxiliary braking system, with training records provided to HVS.
- (e) At least one forward-facing camera and one rear-facing camera must be mounted on the prime mover and must operate in accordance with the Restricted Access Vehicle Video Recording Requirements. The rear-facing camera must be positioned on the driver's side of the prime mover.

15.4 Roelands Hill Access

If approved to operate on Coalfields Highway, Roelands Hill, a Level 3 RAV must be operated in accordance with the following conditions:

- (a) The RAV must not exceed 36.5 metres in length.
- (b) The prime mover must be enrolled under the Hill Descent Monitoring (HDM) Scheme with a Transport Certification Australia (TCA) Certified Service Provider to ensure all vehicles stop in the mandatory stopping bay at the top of Roelands Hill to check brakes, then descend in the appropriate low gear at a speed of no more than 40km/h.
- (c) The prime mover must be fitted with and utilise an auxiliary braking system when descending Roelands Hill. Drivers must be familiar with the operation of the particular auxiliary braking system, with training records provided to HVS.
- (d) At least one forward-facing camera and one rear-facing camera must be mounted on the prime mover and must operate in accordance with the Restricted Access Vehicle Video Recording Requirements. The rear-facing camera must be positioned on the driver's side of the prime mover.

16 SPEED & SAFE TRAVEL REQUIREMENTS

16.1 Speed Restrictions

16.1.1 Unless otherwise specified as a condition for a particular road in the Approved Network, a RAV must not be driven at a speed exceeding 10 km/h lower than the posted speed limit, where the posted speed limit is greater than 60 km/h.

16.1.2 A Level 4 RAV must not be driven at a speed exceeding 90 km/h.

16.2 Minimum Following Distance

The driver of a RAV must maintain a distance of at least 200 metres from any other heavy vehicle travelling in front of it, unless:

- (a) The RAV is overtaking the vehicle in front or the vehicle in front is stopping; or
- (b) There is a separate lane available for the use of overtaking traffic; or

- (c) The RAV is in an urban area and it is not reasonably practicable to maintain such a distance; or
- (d) The RAV is stopped, or coming to a stop for the purpose of complying with a provision of any law or avoiding conflict with other traffic.

16.3 Poor Visibility

16.3.1 The driver of a RAV must not begin to travel if, due to circumstances such as fog, heavy rain, smoke, dust or insect plague:

- (a) The visibility is less than 250 metres during the day; or
- (b) The headlights of a vehicle approaching within 250 metres could not be seen at night.

16.3.2 Where a RAV is already travelling when visibility is reduced to the level described above, the driver must drive into the nearest safe parking area and wait until visibility improves beyond that level before continuing to travel.

16.4 Overtaking

The driver of the RAV must not overtake another vehicle, unless:

- (a) There is a separate lane available for the purpose of overtaking traffic; or
- (b) The vehicle in front is stopping; or
- (c) The vehicle in front is travelling at a significantly lower speed, i.e., 20 km/h or more below the RAVs legal speed limit; and
- (d) It is safe to do so.

17 WARNING SIGN REQUIREMENTS

17.1 Warning Signs for Certain Combinations

17.1.1 A Level 2 RAV exceeding 22 metres in length, but not exceeding 27.5 metres in length, must display a 27.5m Long RAV Warning Sign, as specified in [Appendix 1](#).

17.1.2 A Level 2B RAV exceeding 27.5 metres in length, but not exceeding 30 metres in length, must display a 30m Long RAV Warning Sign, as specified in [Appendix 1](#).

17.1.3 A Level 2B RAV exceeding 30 metres in length, must display a Specific Length RAV Warning Sign, with the actual vehicle combination length rounded up to the nearest metre, and showing a car equivalent based on a 5-metre-long car (rounded up), as per the example in [Appendix 1](#).

17.1.4 A Level 3 RAV exceeding 30 metres in length, but not exceeding 36.5 metres in length, must display a 36.5m Long RAV Warning Sign, as specified in [Appendix 1](#).

17.1.5 A Level 3B RAV exceeding 36.5 metres in length, but not exceeding 42 metres in length, must display a 42m Long RAV Warning Sign, as specified in [Appendix 1](#).

17.1.6 A Level 4 RAV exceeding 42 metres in length, but not exceeding 53.5 metres in length, must display a 53.5m Long RAV Warning Sign, as specified in [Appendix 1](#).

17.1.7 A Level 4B RAV exceeding 53.5 metres in length, but not exceeding 60 metres in length, must display a 60m Long RAV Warning Sign, as specified in [Appendix 2](#).

17.1.8 The RAV warning sign must only be fitted horizontally on the rear of the RAV.

17.2 Warning Signs Specifications

17.2.1 The RAV warning sign must be manufactured in one or 2 parts from:

- (a) sheet steel with a minimum thickness of 0.8 mm thick; or
- (b) a sticker attached to an equivalent rigid surface; or
- (c) a flexible vinyl material, provided the sign is attached in such a manner that ensures it remains taut and clearly visible.

17.2.2 The RAV warning sign must be the minimum dimensions shown in [Appendix 3](#).

17.2.3 The RAV warning sign must display the words specified in [Appendix 1](#) or [Appendix 2](#), in black capital letters, in typeface Helvetica Neue Bold Condensed, and the size shown [Appendix 3](#).

17.2.4 If the RAV warning sign is in 2 parts, it must be split through the centre as shown in [Appendix 4](#).

17.2.5 The RAV warning sign must have a black border. A black border is not required on the inside of a RAV warning sign split in 2 parts.

17.2.6 The RAV warning sign must display the sign manufacturer's name or logo, and the brand and class of retro-reflective material used, in block letters not over 10 mm high.

17.2.7 The RAV warning sign must be coated with yellow retro-reflective material that complies with class 100 or 400 of AS1906.1 – 2017 *Retroreflective Materials and Devices for Road Traffic Control Purposes – Retroreflective Sheeting*.

17.2.8 The RAV warning sign must only be fitted on the rear of the RAV and so:

- (a) no part of the sign is —
 - (i) over 2.75 m above ground level; or
 - (ii) under 500 mm above ground level;and
- (b) if the sign is in 2 parts, the parts are fitted at the same height above ground level.

Note: *The 60m RAV Warning Size cannot be split into 2 parts.*

17.3 Warning Signs Not to be Displayed on Other Vehicles

17.3.1 The whole or a part of a RAV warning sign must not be displayed unless it is displayed in accordance with this section.

17.3.2 A RAV must not display a warning sign not specified in this section.

17.4 Interstate Signage Exemption

A RAV does not need to comply with this section if it is engaged in an interstate operation, provided:

- (a) The RAV is complying with the signage requirements applicable to the State of origin; and
- (b) The RAV remains in Western Australia for a maximum of 7 days.

18 COMPULSORY HEAVY VEHICLE INCIDENT REPORTING

All on-road incidents involving a RAV must be reported to Main Roads Heavy Vehicle Services by the permit holder. The Heavy Vehicle Incident Reporting form is available on the Incident Reporting page on the Main Roads website and it must be submitted within 48 hours of the incident occurring.

19 AMENDMENTS TO OPERATING CONDITIONS & ACCESS

19.1 Access Approval Suspension & Revocation

19.1.1 Approval to operate a RAV may be suspended when road and/or traffic conditions are considered unsuitable. Main Roads personnel, WA Police or Traffic Escort Wardens, may make verbal notification of such suspension.

19.1.2 Approval to operate a RAV may be suspended or revoked if the operator or vehicle combination fails to comply with any of the requirements specified in these Operating Conditions.

19.2 Amendments & Notifications

19.2.1 These Operating Conditions are subject to occasional amendments. If amendments are made that impact transport operators, they will be published as an “HVS Update” on the Main Roads website on the first working day of the month. Operators and drivers are required to ensure that they are operating vehicles on the public road network in accordance with the current and up to date Operating Conditions.

19.2.2 The RAV Networks are subject to periodic amendments, which include additional roads being included in the lists, roads being removed from the lists, or amendments being made to a condition relating to a particular road in the lists. RAV Network updates will be effective from the Wednesday following the amendment and the RAV Networks are maintained in the RAV Mapping Tool on the Main Roads website. Operators and drivers are required to ensure they are operating vehicles on the public road network in accordance with the current and up to date RAV Networks.

Heavy Vehicle Travel Impacts are published when road conditions may impede the movement of Restricted Access Vehicles. Operators and drivers are required to check the Heavy Vehicle Travel Impacts in the RAV Mapping Tool on the Main Roads website immediately prior to operating the vehicle on the public road network to ensure that there is no relevant information that will impede their vehicle operating on the WA road network.

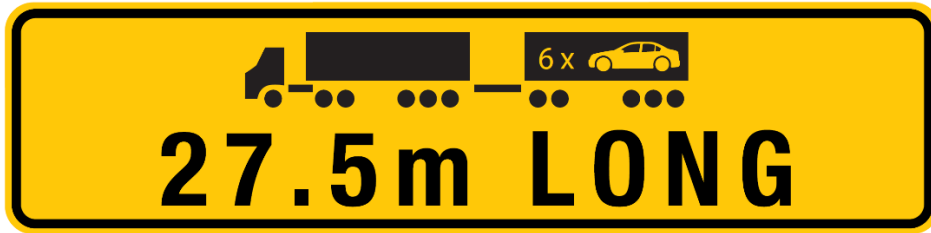
19.2.3 All conditions stipulated in HVS Updates or Heavy Vehicle Travel Impacts must be adhered to.

20 APPENDICES

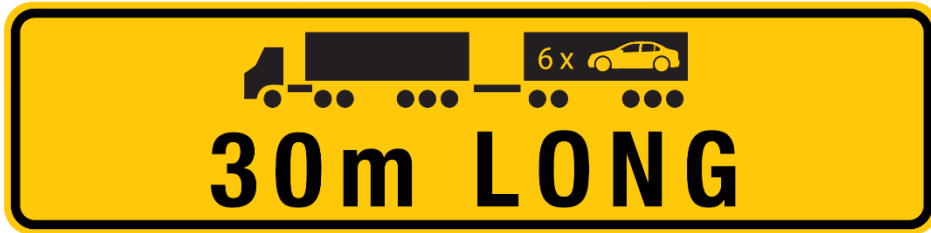
Appendix	Title
Appendix 1	RAV Warning Signs
Appendix 2	60m RAV Warning Sign
Appendix 3	RAV Warning Sign Dimensions & Font Specifications
Appendix 4	Split RAV Warning Signs

Appendix 1 – RAV Warning Signs

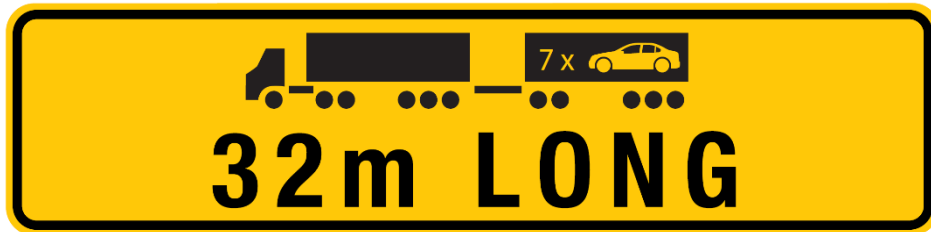
27.5m Long RAV Warning Sign:



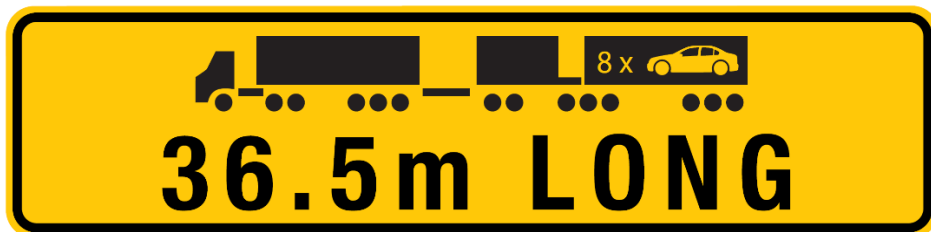
30m Long RAV Warning Sign:



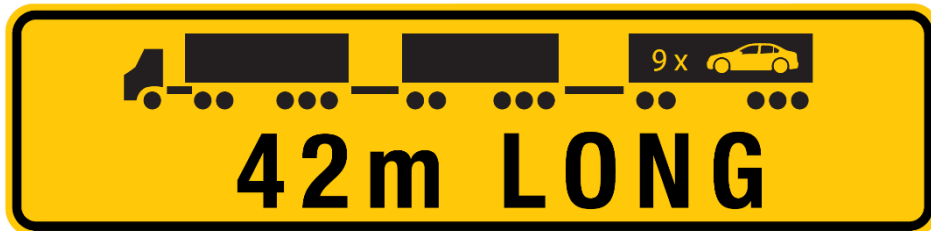
Specific Length RAV Warning Sign:



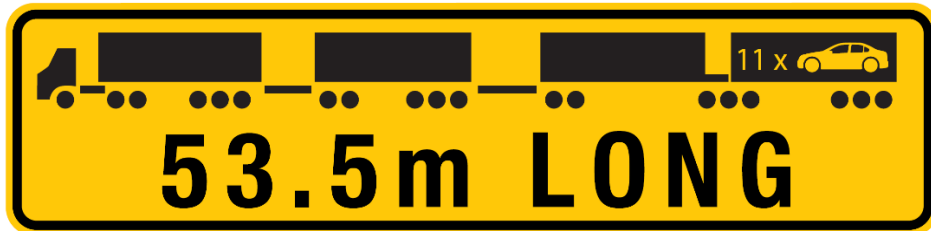
36.5m Long RAV Warning Sign:



42m Long RAV Warning Sign:



53.5m Long RAV Warning Sign:



Appendix 2 – 60m RAV Warning Sign

60m Long RAV Warning Sign:



Appendix 3 – RAV Warning Sign Dimensions & Font Specifications

All Signs other the 60m Long RAV Warning Sign:



60m Long RAV Warning Sign:



Appendix 4 – Split RAV Warning Signs

Example of Split RAV Warning Sign:

