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Class 1 RAV
8 Tyre Per Axle Low Loader
Overmass Period Permit

Operating Conditions

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Refer to the Main Roads website for current version.

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Document Control

Owner	Director Heavy Vehicle Services
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Amendments

Revision Number	Revision Date	Description of Key Changes	Section
1	20/12/2023	Added Category 1.3 and 2.3 combinations with 2x4 dolly.	s. 1 & 5
2	15/01/2024	Re-ordered Categories to move the 2x4 dolly combination to a Category 1.2 and 2.2 respectively.	s. 1 & 5
3	5/02/2024	Updated axle spacing requirements to include 2x4 dolly combination.	s. 6
4	27/10/2025	Updated hyperlinks due to website changes. Clarified accreditation requirements.	s. 2
5	11/02/2026	Clarified licensing requirements	s. 3
6	8/06/2026	Clarified definition for large indivisible item.	Definitions
7	17/07/2026	Increased maximum "E" axle spacing to 14.5 metres.	s. 7

REFERENCES AND RELATED DOCUMENTS

The following document relates to these Operating Conditions and should be read in conjunction with these Operating Conditions. This document is available on the Oversize Overmass (OSOM) page on the Main Roads website.

Document Name	Location
Guidelines for Transporting Multiple Items on an Oversize or Over-mass Vehicle	https://www.mainroads.wa.gov.au/4a285d/globalassets/heavy-vehicles/permits-orders-schemes/osom/guidelines-for-transporting-multiple-items-on-an-oversize-or-over-mass-vehicle.pdf

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
8TPA Low Loader Networks	The approved roads applicable to vehicles operating under the <i>Class 1 RAV 8 Tyre Per Axle Low Loader Overmass Period Permit</i> , which are published in the form of Road Tables and are available on the RAV Mapping Tool on the Main Roads website.
8TPALLN1	<i>8TPA Low Loader Network 1</i> approved roads, published in the form of Road Tables and available on the RAV Mapping Tool on the Main Roads website.
8TPALLN2	<i>8TPA Low Loader Network 2</i> approved roads, published in the form of Road Tables and available on the RAV Mapping Tool on the Main Roads website.
8TPALLN3	<i>8TPA Low Loader Network 3</i> approved roads, published in the form of Road Tables and available on the RAV Mapping Tool on the Main Roads website.
8TPALLN4	<i>8TPA Low Loader Network 4</i> approved roads, published in the form of Road Tables and available on the RAV Mapping Tool on the Main Roads website.
8TPALLN5	<i>8TPA Low Loader Network 5</i> approved roads, published in the form of Road Tables and available on the RAV Mapping Tool on the Main Roads website.
8TPALLN6	<i>8TPA Low Loader Network 6</i> approved roads, published in the form of Road Tables and available on the RAV Mapping Tool on the Main Roads website.
Large Indivisible Item	An item that cannot be divided without extreme effort, expense or risk of damage to it; and cannot be carried on any vehicle without exceeding a mass or dimension limit. For the purpose of this guideline a large indivisible item:

Term	Definition
	(a) Includes equipment that is essential for transporting the large indivisible load, such as customised framing necessary to support the large indivisible load. (b) Does not include a container or other receptacle exceeding a statutory dimension limit and carrying bulk or general freight. (c) Does not include grillage or transport / loading beams.
Licensing Authority	A Government Authority responsible for the administration of the vehicle licensing provision of the law of the relevant State, Territory or the Commonwealth.
Main Roads Website	www.mainroads.wa.gov.au – documents referenced within these operating conditions are published on the Oversize Over-mass Permits page.
Overmass Single Trip Permit	Includes a <i>Class 1 Overmass Single Trip Permit</i> or a <i>Class 1 Oversize & Overmass Single Trip Permit</i> .
Permit	A permit issued under Part 4 of the <i>Road Traffic (Vehicles) Act 2012</i> , including these Operating Conditions and the <i>8TPA Low Loader Networks</i> .
Permit Holder	The Operator to whom the permit is issued.
RAV	An approved vehicle combination to which the “ <i>Class 1 RAV 8 Tyre Per Axle Low Loader Overmass Period Permit</i> ” applies.

1 APPLICATION

1.1 Approved Vehicles

1.1.1 The *Class 1 RAV 8 Tyre Per Axle Low Loader Overmass Period Permit* applies to a RAV described in the following table when carrying a large indivisible item:

Category 1 RAVs	
Category	Vehicle Description
1.1	Tandem Drive Prime Mover Towing a 3 Axle Low Loader with 8 Tyres Per Axle 
1.2	Tandem Drive Prime Mover Towing a 2 Axle Dolly with 4 Tyres per axle and a 3 Axle Low Loader with 8 Tyres Per Axle 
1.3	Tandem Drive Prime Mover Towing a 2 Axle Dolly and a 3 Axle Low Loader, both with 8 Tyres Per Axle 
Category 2 RAVs	
Category	Vehicle Description
2.1	Tandem Drive Prime Mover Towing a 4 Axle Low Loader with 8 Tyres Per Axle 
2.2	Tandem Drive Prime Mover Towing a 2 Axle Dolly with 4 Tyres per axle and a 4 Axle Low Loader with 8 Tyres Per Axle 
2.3	Tandem Drive Prime Mover Towing a 2 Axle Dolly and a 4 Axle Low Loader, both with 8 Tyres Per Axle 

1.1.2 The *Class 1 RAV 8 Tyre Per Axle Low Loader Overmass Period Permit* only applies to a RAV complying with the axle spacing requirements specified in clause 7.

2 COMPULSORY WA HEAVY VEHICLE ACCREDITATION

2.1 Requirement for Accreditation

The *Class 1 RAV 8 Tyre Per Axle Low Loader Overmass Period Permit* does not apply unless and until there is a person who is accredited in relation to the vehicle.

2.2 Effect on the Permit

If the person who is accredited in relation to the vehicle ceases to be accredited, the *Class 1 RAV 8 Tyre Per Axle Low Loader Overmass Period Permit* ceases to have effect on and from the day on which the person ceases to be accredited.

2.3 Non-Application of this Section

The requirement for Accreditation under this section does not apply to a person operating a RAV that is not being used in connection with a business.

3 LICENSING REQUIREMENTS

3.1 Requirement for Appropriate Vehicle Licensing

The *Class 1 RAV 8 Tyre Per Axle Low Loader Overmass Period Permit* does not apply unless the prime mover is licensed under the appropriate heavy vehicle licence class applicable to the number of trailers being towed.

3.2 Complying with Licence Conditions

In addition to these Operating Conditions, the RAV must be driven in accordance with any conditions of the vehicle's licence, as imposed by the relevant licensing authority.

4 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.

5 DIMENSION REQUIREMENTS

A RAV exceeding a statutory dimension limit must operate in conjunction with a *Class 1 RAV Oversize Period Permit* or a *Class 1 RAV Oversize Single Trip Permit*.

6 MASS REQUIREMENTS

6.1 Prime Mover Mass Limits

A prime mover must not exceed the following mass limits:

Axle Group	Mass Limit
Single Steer Axle with tyres <375mm	6.5 tonnes
Single Steer Axle with tyres ≥375mm	7.1 tonnes
Twin Steer Axle Group with non-load sharing suspension	10 tonnes
Twin Steer Axle Group with load sharing suspension and tyres <375mm	11 tonnes
Twin Steer Axle Group with load sharing suspension and tyres ≥375mm	12 tonnes
Tandem Drive Axle Group	18.5 tonnes

6.2 Trailer Mass Limits & Ground Contact Width

6.2.1 A low loader and low loader dolly must not exceed the following mass limits:

Category 1 RAVs		Ground Contact Width	Mass Per Axle	Approved Network
Category	Vehicle Description			
1.1	Tandem Drive Prime Mover Towing a 3 Axle Low Loader with 8 Tyres Per Axle 	3.0 m	14 t	8TPALLN1
		3.5 m	15 t	8TPALLN2
		3.7 m	16 t	8TPALLN3
1.2	Tandem Drive Prime Mover Towing a 2 Axle Dolly with 4 Tyres Per Axle and a 3 Axle Low Loader with 8 Tyres Per Axle 	Dolly 2.4 m LLoader 3.0 m	Dolly 9 t LLoader 14 t	8TPALLN1
		Dolly 2.4 m LLoader 3.5 m	Dolly 9 t LLoader 15 t	8TPALLN2
		Dolly 2.4 m LLoader 3.7 m	Dolly 9 t LLoader 16 t	8TPALLN3
1.3	Tandem Drive Prime Mover Towing a 2 Axle Dolly and a 3 Axle Low Loader with 8 Tyres Per Axle, both with 8 Tyres Per Axle. 	3.0 m	Dolly 12 t LLoader 14 t	8TPALLN1
		3.5 m	Dolly 13 t LLoader 15 t	8TPALLN2
		3.7 m	Dolly 14 t LLoader 16 t	8TPALLN3
Category 2 RAVs		Ground Contact Width	Mass Per Axle	Approved Network
Category	Vehicle Description			
2.1	Tandem Drive Prime Mover Towing a 4 Axle Low Loader with 8 Tyres Per Axle 	3.0 m	12 t	8TPALLN4
		3.5 m	12.75 t	8TPALLN5
		3.7 m	13.75 t	8TPALLN6
2.2	Tandem Drive Prime Mover Towing a 2 Axle Dolly with 4 Tyres Per Axle and a 4 Axle Low Loader with 8 Tyres Per Axle 	Dolly 2.4 m LLoader 3.0 m	Dolly 9 t LLoader 12 t	8TPALLN4
		Dolly 2.4 m LLoader 3.5 m	Dolly 9 t LLoader 12.75 t	8TPALLN5
		Dolly 2.4 m LLoader 3.7 m	Dolly 9 t LLoader 13.75 t	8TPALLN6
2.3	Tandem Drive Prime Mover Towing a 2 Axle Dolly and a 4 Axle Low Loader, both with 8 Tyres Per Axle 	3.0 m	Dolly 12 t LLoader 12 t	8TPALLN4
		3.5 m	Dolly 13 t LLoader 12.75 t	8TPALLN5
		3.7 m	Dolly 14 t LLoader 13.75 t	8TPALLN6

6.2.2 The low loader and low loader dolly must be spread to the minimum ground contact width that is relevant to the mass per axle specified in the table under sub-clause 6.2.1.

7 AXLE SPACING REQUIREMENTS

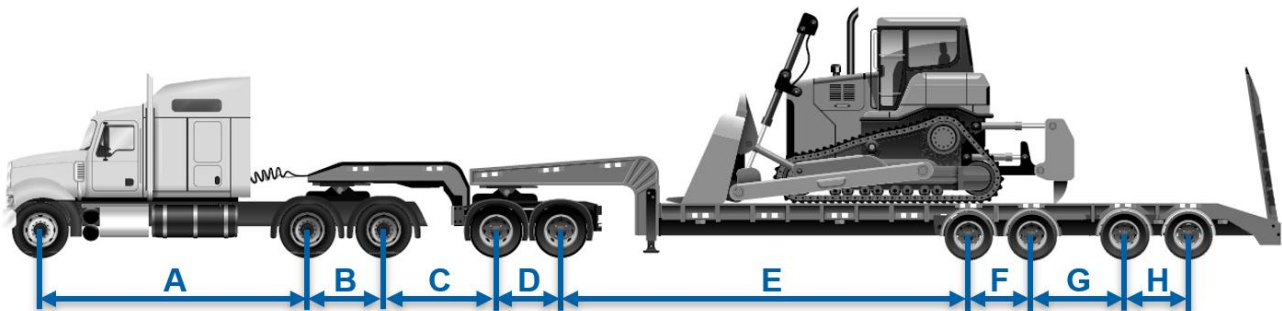
7.1 Axle Spacing Limits

A RAV must comply with the following axle spacing limits:

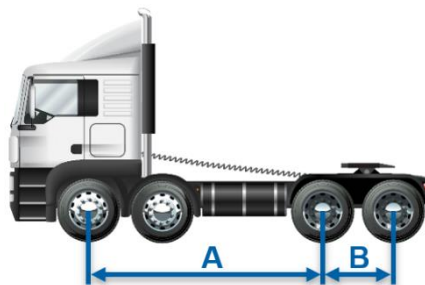
		Axle Spacing (metres)							
		A	B	C	D	E	F	G	H
Vehicle Category	1.1	3.0 – 5.8	1.3 – 1.8	N/A	N/A	6.0 – 14.5	1.8 – 1.85	1.8 – 1.85	N/A
	1.2	3.0 – 5.8	1.3 – 1.8	2.4 – 4.3	1.2 – 1.8	6.0 – 14.5	1.8 – 1.85	1.8 – 1.85	N/A
	1.3	3.0 – 5.8	1.3 – 1.8	2.4 – 4.3	1.2 – 1.8	6.0 – 14.5	1.8 – 1.85	1.8 – 1.85	N/A
	2.1	3.0 – 5.8	1.3 – 1.8	N/A	N/A	6.0 – 14.5	1.2 – 1.4	2.35 – 2.8	1.2 – 1.4
	2.2	3.0 – 5.8	1.3 – 1.8	2.4 – 4.3	1.2 – 1.8	6.0 – 14.5	1.2 – 1.4	2.35 – 2.8	1.2 – 1.4
	2.3	3.0 – 5.8	1.3 – 1.8	2.4 – 4.3	1.2 – 1.8	6.0 – 14.5	1.2 – 1.4	2.35 – 2.8	1.2 – 1.4

7.2 Measuring Axle Spacings

7.2.1 Axle spacing measurements must be taken from the centre of adjacent axles. The “Axle Spacing” rows (labelled A to H) in the table under clause 7.1 correspond with the axle spacings shown in the following diagram.



7.2.2 If the vehicle combination consists of a twin steer prime mover, the axle spacing “A” measurement must be taken as per the following diagram.



8 ACCESS REQUIREMENTS

8.1 Approved Roads and Conditions

8.1.1 A RAV must only travel on a road listed in the relevant Approved Network specified in the table under sub-clause 6.2.1.

8.1.2 A RAV must operate in accordance with any conditions specified for a particular road in the Approved Network.

8.2 Additional Roads

A RAV may travel on additional roads connecting to a road listed in the relevant Approved Network, provided an Overmass Single Trip Permit is obtained for the additional roads.

8.3 Restricted Bridges

A RAV must not cross a bridge on an Approved Network with the condition “Bridge not to be crossed”, except in accordance with clause 8.4.

8.4 Crossing Restricted Bridges

If a RAV needs to cross a bridge on an Approved Network with the condition “Bridge not to be crossed”, a Bridge Crossing Permit must be obtained. An application for a Bridge Crossing Permit can be made by submitting a [Bridge Crossing Permit Application form](#), available on the Main Roads website.

8.5 Route Survey

Prior to departure, the operator or driver of the RAV must assess the route of travel to ensure that it is suitable for use and that it can be driven along without contravening these Operating Conditions.

8.6 Block Truck Requirements

- 8.6.1** Where the mass of the RAV is comparable to the GCM of the prime mover and the route consists of any gradient exceeding 5%, an additional block truck must be used while ascending the gradients.
- 8.6.2** If an operator considers it necessary to use an additional block truck to facilitate the safe movement of the RAV or reduce the impact on the road surface, an additional block truck may be used.
- 8.6.3** A block truck must have a minimum of 14 tonnes on a tandem drive axle group or 17 tonnes on a tri drive axle group.
- 8.6.4** An additional block truck may operate at higher mass limits in accordance with a *Block Truck Overmass Period Permit*.
- 8.6.5** When connecting an additional block truck to the RAV under the provisions of this clause, the length of the vehicle combination may exceed the maximum length specified on the oversize permit by the length of the block truck.

9 CARRYING MULTIPLE ITEMS

A RAV may carry other items in addition to the large indivisible item(s), provided the other items are carried in accordance with the *Guidelines for Transporting Multiple Items on an Oversize or Over-mass Vehicle*, available on the Main Roads website.

10 PERMIT STATUS

10.1 Permit Suspension & Revocation

- 10.1.1** 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.
- 10.1.2** 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 the permit or these Operating Conditions.

10.2 Permit Amendments & Notifications

- 10.2.1** 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 Operating Conditions.
- 10.2.2** The RAV Networks and Restricted Bridges are subject to periodic amendments, which include roads or restricted bridges being added or removed, or amendments being made to a condition relating to a particular road or bridge. RAV Networks and Restricted Bridges updates will be effective from the Wednesday following the amendment. The RAV Networks and Restricted Bridges are maintained in the RAV Mapping Tool and as lists 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 published RAV Networks and Restricted Bridges.
- 10.2.3** Heavy Vehicle Travel Impacts are published when road conditions may impede the movement of a RAV. Operators and drivers are required to check the Heavy Vehicle Travel Impacts on the Main Roads website immediately prior to operating the RAV on the public road network to ensure that there is no relevant information that will impede their RAV operating safely on the WA road network.
- 10.2.4** All conditions stipulated in HVS Updates or Heavy Vehicle Travel Impacts must be adhered to.
- 10.2.5** Where a condition stipulates that contact must be made with a site supervisor or any other person prior to travel, this must be done via email or text message and evidence provided to Main Roads’ personnel upon request.