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WESTERN AUSTRALIA

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Western Australia.*

Oversize Divisible Products

Prime Mover, Trailer Combinations

Period Permit

Operating Conditions

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Refer to the Main Roads website for the current version.

D10#77018
January 2025

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Amendments

Revision Number	Revision Date	Description of Key Changes	Section
1	24/04/2020	Updated document format and amended vehicle categories and access approvals.	All
2	03/08/2020	Changed name from RAV Network to Oversize Divisible Products Network	Section 1.1 and 2.3.4
3	08/09/2020	Updated Compulsory Heavy Vehicle Incident Reporting.	Section 6
4	16/11/2020	Amended definitions and the category 4 vehicles in table 1.1 to refer to Oversize Divisible Products Networks 7 and 8.	Section 1.1
5	01/07/2024	Added RAV Warning Sign requirements.	s.5, Appendix 2 and 3.
6	01/08/2024	Added standard following distance, poor visibility and overtaking clauses. Clarify RAV Warning Sign requirements.	s.3 and 5, Appendix 2 and 3.
7	12/11/2024	Amended RAV warning sign requirements.	s.5
8	21/01/2025	Clarified "non-approved" vehicle combinations.	cl. 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
Load Restraint Guide	The document entitled “Load Restraint Guide” Second Edition 2004 and published by the National Transport Commission established by the National Transport Commission Act 2003 (Commonwealth) section 5.
Main Roads Website	www.mainroads.wa.gov.au
Oversize Divisible Products Network 1	The Oversize Divisible Products Network 1 prohibited roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Oversize Divisible Products Network 2	The Oversize Divisible Products Network 2 approved roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Oversize Divisible Products Network 3	The Oversize Divisible Products Network 3 approved roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Oversize Divisible Products Network 4	The Oversize Divisible Products Network 4 approved roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Oversize Divisible Products Network 5	The Oversize Divisible Products Network 5 approved roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Oversize Divisible Products Network 6	The Oversize Divisible Products Network 6 approved roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Oversize Divisible Products Network 7	The Oversize Divisible Products Network 7 approved roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Oversize Divisible Products Network 8	The Oversize Divisible Products Network 8 approved roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
Permit	Means a permit issued under Part 4 of the Road Traffic (Vehicles) Act 2012, 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.
RAV	Restricted Access Vehicle to which this permit applies, including any load.

REFERENCES AND RELATED DOCUMENTS

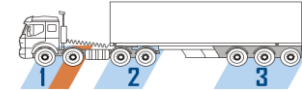

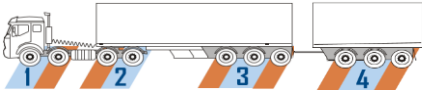
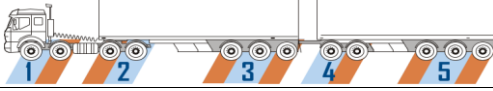
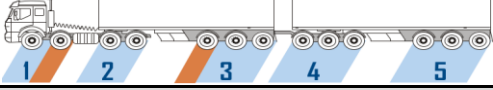
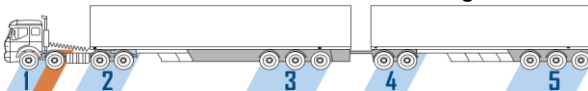
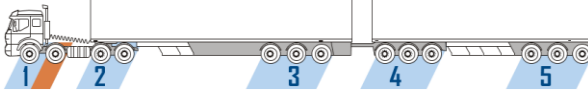

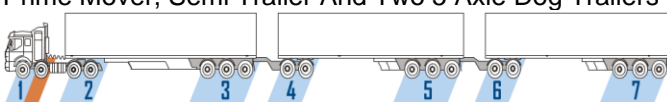
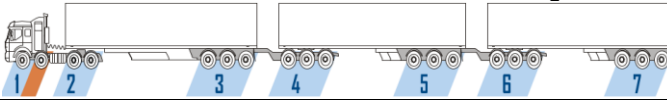

The following documents relate to these Operating Conditions and are available on the Main Roads website:

Document Name	Location
Contact Details for Other Agency Approvals	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/contact-details-for-other-agency-approvals.pdf?v=4a4c3e
Oversize Vehicle & Pilot Vehicle General Requirements	https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/osom/oversize-vehicle-and-pilot-vehicle-general-requirements.pdf?v=49f806

1 APPLICATION

1.1 Approved Vehicles

The *Oversize Divisible Products – Prime Mover, Trailer Combinations Period Permit* only applies to a RAV shown in the “*Vehicle Description*” column in the following table, when carrying an *Approved Product* specified in Clause 1.2:

Category	Vehicle Description	Max. Length	Max. Width	Approved Network
1				
1.1	Prime Mover & Semi Trailer 	19.0m	2.7m	Oversize Divisible Products Network 1
2				
2.1	B-Double 	27.5m	2.7m	Oversize Divisible Products Network 2
2.2	Prime Mover, Semi Trailer & Pig Trailer 	27.5m	2.7m	Oversize Divisible Products Network 2
2.3	Prime Mover, Semi Trailer & 5 Axle Dog Trailer 	27.5m	2.7m	Oversize Divisible Products Network 3
2.4	Prime Mover, Semi Trailer & 6 Axle Dog Trailer 	27.5m	2.7m	Oversize Divisible Products Network 4
3				
3.1	Prime Mover, Semi Trailer & 5 Axle Dog Trailer 	36.5m	2.7m	Oversize Divisible Products Network 5
3.2	Prime Mover, Semi Trailer & 6 Axle Dog Trailer 	36.5m	2.7m	Oversize Divisible Products Network 6
3.3	B Triple 	36.5m	2.7m	Oversize Divisible Products Network 6
4				
4.1	Prime Mover, Semi Trailer And Two 5 Axle Dog Trailers 	53.5m	2.7m	Oversize Divisible Products Network 7
4.2	Prime Mover, Semi Trailer And Two 6 Axle Dog Trailers 	53.5m	2.7m	Oversize Divisible Products Network 8
4.3	Prime Mover And Double B Double 	53.5m	2.7m	Oversize Divisible Products Network 8

1.2 Approved Products

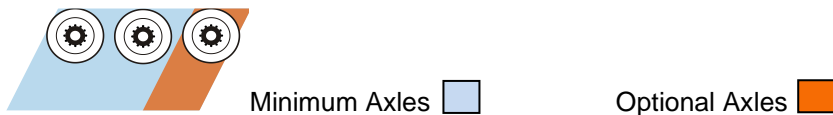
1.2.1 The *Oversize Divisible Products – Prime Mover, Trailer Combinations Period Permit* only applies to a RAV when carrying the following products:

- (a) Concrete Pipes;
- (b) Baled Wool; or
- (c) Baled Hay or Straw, baled to size:
 - i) 4'x3'x8'; or
 - ii) 4'x4'x8'.

1.2.2 In addition to the *Approved Products* stipulated in sub-clauses 1.2.1, a RAV may also carry machinery necessary to load and unload the Approved Product.

1.3 Approved Axle Configuration

1.3.1 The axle groups of a RAV described in Clause 1.1 are colour coded to indicate the minimum and maximum number of axles allowable for that category of vehicle, as shown below:



1.3.2 The *Oversize Divisible Products – Prime Mover, Trailer Combinations Period Permit* does not apply to a RAV with less than the number of axles indicated, unless the height is less than 4.3 metres.

1.3.3 The *Oversize Divisible Products – Prime Mover, Trailer Combinations Period Permit* does not apply to a RAV with more than the number of axles indicated.

1.4 Non-Approved Vehicles

1.4.1 The *Oversize Divisible Products – Prime Mover, Trailer Combinations Period Permit* does not apply to a vehicle combination not shown in the table under clause 1.1.

1.4.2 The *Oversize Divisible Products – Prime Mover, Trailer Combinations Period Permit* does not apply to an A-triple (prime mover, semi-trailer and 2 dog trailers) with a length less than 36.5 metres.

2 DIMENSION REQUIREMENTS

2.1 Length Limits

2.1.1 A RAV must not exceed the maximum length indicated for the particular vehicle category in Clause 1.1.

2.1.2 A semi-trailer used in a RAV must not exceed 13.73 metres from the front of the trailer to the rear of the trailer (excluding any rounded front or attachments to the front of the trailer deck).

2.1.3 The two (2) semi-trailers used in a B-double must not be more than 22 metres in combined length, measured from the front of the lead semi-trailer to the rear of the second semi-trailer (including the space between the semi-trailers and excluding any rounded front or attachments to the front of the trailer deck).

2.2 Width Limits

A RAV must not exceed the maximum width indicated for the particular vehicle category in Clause 1.1.

2.3 Height Requirements

2.3.1 A RAV must not exceed a height of 4.3 metres, unless otherwise specified in this section.

2.3.2 A RAV may operate with a height up to 4.6 metres, provided:

- (a) The vehicle is loaded with Baled Hay or Straw only;
- (b) The semi-trailer deck does not exceed a height of 1 metre;
- (c) The semi-trailer is a tri axle semi-trailer, fitted with dual tyres;
- (d) All converter dollies used in the vehicle combination are tandem or tri axle converter dollies; and
- (e) The prime mover has a tandem drive axle group.

2.3.3 A pig trailer must not exceed a height of 3.5 metres, including the load.

2.3.4 A RAV exceeding 4.3 metres in height must not be driven on a road without current written approval from all the relevant Cable Operators, unless the height is less than 4.6 metres and the vehicle is being driven on a road that is listed in Oversize Divisible Products Network 2. The written approval must be carried in the RAV and produced upon request.

Note: “Contact Details for Other Agency Approvals” are available on the Oversize Over-mass Permits page on the Main Roads website.

2.4 Axle Spacings

A RAV must comply with the minimum axle spacing requirements specified in the following table:

Adjacent Axles or Axle Groups	Minimum Distance
Single axle to single axle	2.5 m
Single axle to tandem axle group	4.3 m
Single axle to tri axle group	5.5 m
Tandem axle group to tandem axle group	6.8 m
Tandem axle group to tri axle group	8.0 m
Tri axle group to tri axle group	9.2 m

Note: Axle spacing measurements are taken from the outermost extreme axles of the two adjacent axle groups, as shown below:



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

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

3 ACCESS REQUIREMENTS

3.1 Approved Roads and Conditions

- 3.1.1** A RAV must not operate on any road that is not in the Approved Network specified for the particular vehicle category in Clause 1.1.
- 3.1.2** A RAV must operate in accordance with any conditions specified for a particular road in the Approved Network.

3.2 Prohibited Roads

- 3.2.1** A RAV must not operate on any of the following roads:
- (a) Graham Farmer Freeway;
 - (b) Mitchell Freeway;
 - (c) Kwinana Freeway;
 - (d) Guildford Road – between Walcott Street & Tonkin Highway; and
 - (e) Railway Ave, Armadale – between Gillam Drive & Lake Road.
- 3.2.2** Despite sub-clause 3.2.1, a RAV that does not exceed 2.5 metres in width may operate on the section of Kwinana Freeway between Pinjarra Road and Leach Highway.

3.3 Speed Restrictions

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

3.4 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.

3.5 Poor Visibility

- 3.5.1** 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.
- 3.5.2** 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.

3.6 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.

4 WARNING LIGHTS & FLAGS

4.1 Lights

A RAV exceeding 2.5m in width must operate with headlights switched on at all times.

4.2 Warning Flags

- 4.2.1 A RAV exceeding 2.5 metres in width must display four (4) brightly coloured red, yellow, or red and yellow flags, at least 450mm long and 450mm wide. One flag must be positioned at each side of both the front and rear of the vehicle, or if there is any projecting load, at each side of both the front and rear of the projecting load.
- 4.2.2 Warning flags must comply with the requirements set out in the *Oversize Vehicle & Pilot Vehicle General Requirements*.

5 WARNING SIGN REQUIREMENTS

5.1 Warning Signs for Certain Combinations

- 5.1.1 Instead of a “Road Train” or “Long Vehicle” sign, a RAV may display one of the RAV warning signs specified in this clause.
- 5.1.2 A RAV exceeding 22 metres in length, but not exceeding 27.5 metres in length, may display a 27.5m Long RAV Warning Sign, as specified in [Appendix 2](#).
- 5.1.3 A RAV exceeding 27.5 metres in length, but not exceeding 36.5 metres in length, may display a 36.5m Long RAV Warning Sign, as specified in [Appendix 2](#).
- 5.1.4 A RAV exceeding 36.5 metres in length, but not exceeding 53.5 metres in length, may display a 53.5m Long RAV Warning Sign, as specified in [Appendix 2](#).
- 5.1.5 The RAV warning sign must only be fitted horizontally on the rear of the RAV.

5.2 Oversize Warning Sign

- 5.2.1 In addition to a “Long Vehicle”, “Road Train” or RAV Warning Sign specified in clause 5.1, a RAV exceeding 2.5 metres in width must clearly display:
 - (a) “Oversize” warning signs on the front of the vehicle; and
 - (b) “Oversize” warning signs on the rear of the vehicle or if carrying a rear projecting load, the “Oversize” warning sign is to be mounted as close to the rear of the load as practical.

5.2.2 An “Oversize” warning sign must comply with the requirements set out in the *Oversize Vehicle & Pilot Vehicle General Requirements*.

5.2.3 A RAV must not display an “Oversize” warning sign if not required under this clause.

5.3 Warning Signs Specifications

5.3.1 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.

5.3.2 The RAV warning sign must be at least 1.02 metres wide and at least 250 millimetres high.

5.3.3 The RAV warning sign must display the words specified in [Appendix 2](#), in black capital letters at least 80 millimetres high in typeface Helvetica Neue Bold Condensed.

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

5.3.5 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.

5.3.6 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.

5.3.7 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*.

5.3.8 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: Refer to [Appendix 3](#) for example RAV Warning Sign with sizing specifications.

5.4 Warning Signs Not to be Displayed on Other Vehicles

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

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

6 LOAD RESTRAINT

In addition to the load restraint requirements prescribed in the *Load Restraint Guide* a RAV operating under the *Oversize Divisible Products – Prime Mover, Trailer Combinations Period Permit*, must comply with the additional load restraint requirements stipulated in [Appendix 1](#).

7 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.

8 PERMIT STATUS

8.1 Permit Suspension & Revocation

- 8.1.1** 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.
- 8.1.2** 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.

8.2 Permit Amendments & Notifications

- 8.2.1** 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.
- 8.2.2** 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 Networks updates will be effective from the Wednesday following the amendment and the RAV Networks are maintained as Road Tables and in the RAV Mapping Tool on the Main Road 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.
- 8.2.3** 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.
- 8.2.4** All conditions stipulated in HVS Updates or Heavy Vehicle Travel Impacts must be adhered to.

9 APPENDICES

Appendix	Title
Appendix 1	Load Restraint Specifications for Baled Hay and Straw
Appendix 2	RAV Warning Signs
Appendix 3	Example RAV Warning Sign with Sizing Specifications

Appendix 1: Load Restraint Specifications for Baled Hay and Straw

Specification for 4'x4'x8' bales:

For all bales loaded longitudinally (lengthwise):

- Double strap all 3 high bales approximately 1 metre apart with 2.5 tonne straps.
- Single strap all 2 high bales with one 2.5 tonne strap (or two 2 tonne straps).
- End rows must be longitudinally loaded and double strapped (unless end gates are used).

For all bales loaded transversely (width wise):

- Single strap all 3 high bales with one 2.5 tonne strap; and
- Single strap all 2 high bales with one 2.5 tonne strap (or one 2 tonne strap).

All hay string knots must face inwards when loaded.

For loading 3 bales high:

- The bottom layer must have 6 strings per bale; and
- The middle and top layers must have a minimum of 5 strings per bale.

For loading 2 bales high:

- The bottom layer must have a minimum of 5 strings per bale; and
- The top layer can have good solid bales with only 4 strings.

Specifications for 4'x3'x8' bales:

For all bales loaded longitudinally (lengthwise):

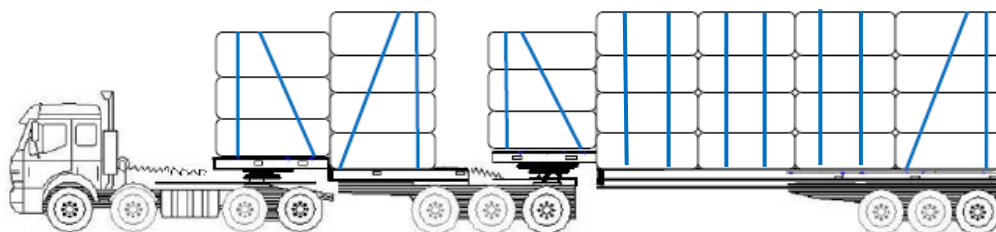
- Double strap all 3 or 4 high bales approximately 1 metre apart with 2.5 tonne straps.
- Single strap all 2 high bales with one 2.5 tonne strap (or two 2 tonne straps).
- End rows must be longitudinally loaded and double strapped (unless end gates are used).

For all bales loaded transversely (width wise):

- Single strap all 3 or 4 high bales with one 2.5 tonne strap;
- Single strap all 2 high bales with one 2.5 tonne strap (or one 2 tonne strap).

Diagonal Bracing

Diagonal bracing provides an enormous improvement to load stability. Since end gates are not typically used in Western Australia, it is necessary to diagonally brace the end stack of bales on each vehicle in order to comply with the requirements of the *Load Restraint Guide*.

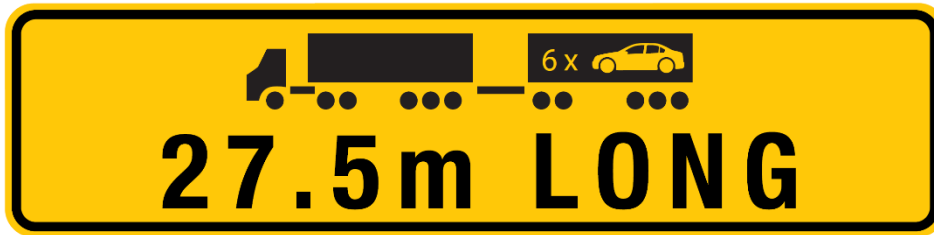


Lashing specification

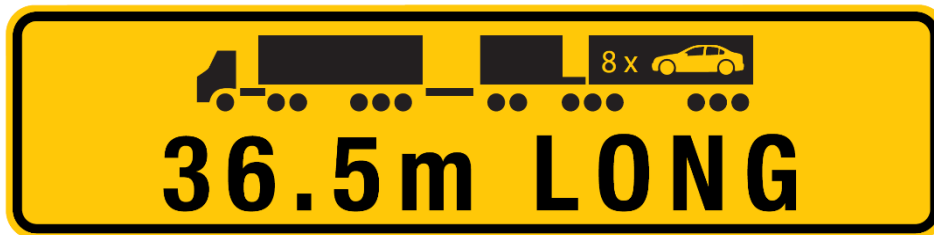
The tie down lashings must conform to Australian Standard 4380 and be labelled accordingly. All straps to be in good condition as described in AS 4380 (no tears, nicks, cuts abrasions, joins etc). AS/NZS 4380: 2001 may be obtained from the Australian Standards' website www.standards.com.au.

Appendix 2 – RAV Warning Signs

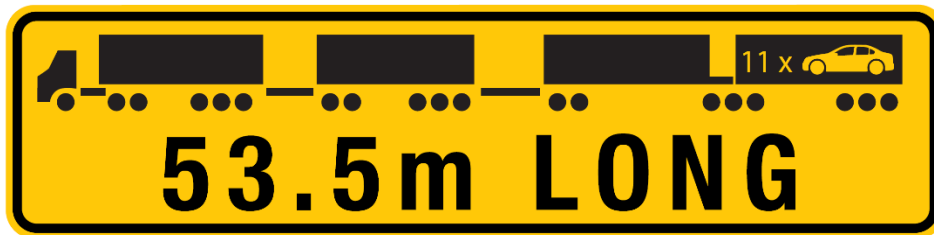
27.5m Long RAV Warning Sign:



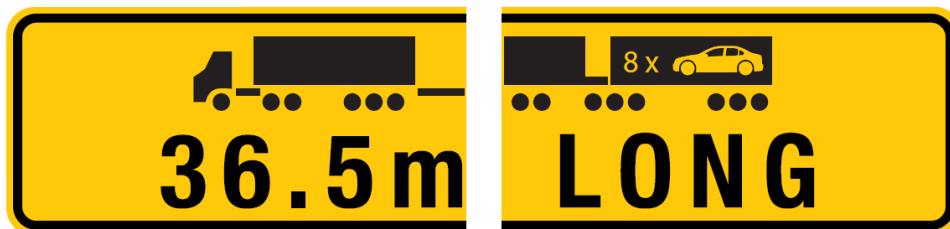
36.5m Long RAV Warning Sign:



53.5m Long RAV Warning Sign:



Split RAV Warning Sign:



Appendix 3 – Example RAV Warning Sign with Sizing Specifications

