

# Vehicle dimensions and mass permitting manual (volume 1)

## Part D

### HPMV higher mass permits

**Current as at 1 May 2021**

#### **Disclaimer**

This publication is intended to provide general information about the permitting of heavy commercial vehicles. While every effort has been made to ensure the quality and accuracy of this information, readers are advised that the information provided does not replace or alter the laws of New Zealand, does not replace any legal requirement, and is not a substitute for expert advice applicable to the reader's specific situation. Readers should also be aware that the content in this publication may be replaced or amended subsequent to this publication, and any references to legislation may become out of date if that legislation is amended.

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## Record of amendments in this part

**Note:** Amendments are numbered consecutively and may affect individual or multiple parts in one or both volumes of the *Vehicle dimensions and mass permitting manual*. For a complete record of all amendments to this manual, please refer to the 'Record of amendments' at the start of volume 1 and volume 2.

Amendment to 2nd edition	Description of changes in this part	Effective date
Amendment 5	<p>Revisions reflect legislation changes from the Land Transport (NZTA) Legislation Amendment Act 2020 and the Land Transport Rule: Omnibus Amendments 2020, plus a new pro-forma design approved for HPMV permits.</p> <p>Updated sections:</p> <p><b>D1.1 Definitions and general principles:</b> Information added about the Director of Land Transport role, delegations of authority, and the terminology used in the manual.</p> <p><b>D1.3 General access mass limits:</b> New mass limits for standard-tired tri-axle sets added and definition of 'tri-axle set' amended.</p> <p><b>D2.2 Ten-axle B-train (B1243)</b> added to the list of vehicle designs eligible for an HPMV permit, plus RUC information.</p>	1 May 2021
Amendment 4	<p><b>D3.11 Permit processing times revised.</b> Due to increased volumes and the requirement for more in-depth operator compliance checks, the target time for processing HPMV higher mass permits has been extended to 20 days.</p>	1 February 2021
Amendment 2	<p>Updates reflect the following changes:</p> <ul style="list-style-type: none"> <li>• Amendments to various land transport rules from the Land Transport Rule: Regulatory Stewardship (Omnibus) Amendment 2018, which took effect on 1 June 2019, and</li> <li>• New performance based standards (PBS) introduced by the Transport Agency in May 2019.</li> </ul> <p>Updates also include minor clarifications and additional information. For example, maximum RUC weights have been added to the diagrams of vehicles eligible for HPMV higher mass permits.</p> <p>The following sections have been updated:</p> <p><b>D1.1 General principles:</b> Clarification added that, unlike overweight permits, HPMV permits cannot specify speed, travel time or bridge crossing restrictions.</p> <p><b>D1.2 Axle weight flexibility (AWF):</b> Requirements for general access AWF clarified.</p> <p><b>D1.3 Mass limits tables:</b> Table layout changed to enable easier comparison of general access and HPMV mass limits and axle and tyre type specifications.</p>	1 June 2020

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## Record of amendments in this part continued

Amendment to 2nd edition	Description of changes in this part	Effective date
Amendment 2 (continued)	<p><b>D1.4 'H' sign:</b> Reference to standard for retroreflective signs updated.</p> <p><b>D2.2 Eligible vehicles and maximum RUC weights:</b> Road user charges (RUC) information added to diagrams of vehicles eligible for HPMV permits. Diagram of R12T23 added.</p> <p><b>D2.4 Vehicle attributes check:</b> Two types of attributes check sheets explained.</p> <p><b>D3.5 Required documents with permit application:</b> Note added that, if an overlength permit is also required, non pro-forma vehicle designs are only eligible for a permit in exceptional circumstances.</p> <p><b>D3.9 Declaration on the application form:</b> Note added that false statements may incur penalties.</p>	1 June 2020

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# Part D: HPMV higher mass permits

## Introduction

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**About this part** This part of the *Vehicle dimensions and mass permitting manual* provides guidance for transport operators who:

- operate a high productivity motor vehicle (HPMV), and
- require a higher mass permit to exceed general access gross mass or axle mass limits.

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**Audience** The intended audience for this part is:

- transport operators who require an HPMV higher mass permit
- Waka Kotahi NZ Transport Agency staff and contractors involved in processing higher mass permit applications
- local road controlling authorities
- designers and manufacturers of vehicles who might operate under an HPMV higher mass permit, and
- enforcement agents such as the Commercial Vehicle Safety Team (CVST) of the New Zealand Police.

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**Terminology and abbreviations** Specific terminology and abbreviations are used throughout this manual. For definitions and explanations, see *Part I: Definitions and glossary* in this volume of the manual.

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**Related information** For general information about permits to exceed mass limits, refer to part A in this volume, specifically to sections:

- *A1.3 Permits for exceeding prescribed mass limits, and*
- *A1.4 Higher mass limits without a permit (45,000 or 46,000kg).*

Information on other HPMV permit types can be found in:

- *Part E: HPMV overlength permits, and*
- *Part F: HPMV 50MAX permits.*

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## Introduction continued

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**In this part**

This part contains the following chapters:

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Chapter D2: Vehicle requirements for HPMV higher mass permits	D2-1
Chapter D3: How to apply for an HPMV higher mass permit	D3-1

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# Chapter D1: General information about HPMV higher mass permits

## Overview

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### About this chapter

This chapter explains when an HPMV higher mass permit is required. It also gives an overview of axle weight flexibility options with a higher mass permit.

The mass limits prescribed in the Land Transport Rule: Vehicle Dimensions and Mass 2016 (the VDAM Rule) can also be found in this chapter.

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### In this chapter

This chapter contains the following sections:

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D1.1 Definitions and general principles about HPMV higher mass permits	D1-2
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## D1.1 Definitions and general principles about HPMV higher mass permits

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<b>What is an HPMV?</b>	<p>A high productivity motor vehicle is a heavy vehicle or vehicle combination that is used for regular freight movements and is no wider or higher than standard vehicles but operates under a permit to exceed:</p> <ul style="list-style-type: none"> <li>• a gross mass of 44,000kg and general access mass limits specified in the VDAM Rule, and/or</li> <li>• standard vehicle length limits.</li> </ul>
<hr/>	
<b>Legal basis for HPMV permits and Director role</b>	<p>HPMV permits are issued under section 5.9 of the Land Transport Rule: Vehicle Dimensions and Mass 2016 (the VDAM Rule).</p> <p>Under the VDAM rule, Waka Kotahi’s Director of Land Transport is responsible for issuing HPMV permits in accordance with the requirements of the rule.</p> <p>The Director has delegated the authority to issue permits to Waka Kotahi’s permitting staff and their contractors. References in this manual to Waka Kotahi/the Transport Agency or to permitting staff should be interpreted as references to the Director if the reference relates to a Director function under the VDAM Rule.</p>
<hr/>	
<b>Route specific</b>	<p>HPMV higher mass permits are route specific, ie operators are permitted to travel only on the routes specified on the permit.</p>
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<b>‘Higher mass’ versus ‘overweight’ permits</b>	<p>Higher mass permits are distinguished from ‘overweight’ permits, which are specifically for <b>indivisible</b> loads that exceed the general access mass limits prescribed in the VDAM Rule.</p> <p>HPMV higher mass permits are available for both divisible and indivisible loads.</p>
<hr/>	
<b>No speed or bridge restrictions</b>	<p>Unlike overweight permits, HPMV permits cannot specify speed or travel time restrictions, or special bridge crossing requirements. This is because HPMVs are intended for regular freight movements and are meant to operate largely as standard vehicles.</p> <p>For further details, see section <i>A3.2 Permit conditions</i> in part A of this volume.</p>

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## D1.1 Definitions and general principles about HPMV higher mass permits continued

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### Vehicles must be registered

A prerequisite for an HPMV higher mass permit is that all vehicle units applied for must be registered.

Vehicle identification numbers (VINs) are not accepted for higher mass permit applications.

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### 'H' sign

Vehicles operating under an HPMV higher mass permit must display an 'H' sign on the front and rear of the vehicle – see section *D1.4 'H' sign requirements and specifications*.

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### 45/46t without a permit

The VDAM Rule allows for gross mass limits above 44,000kg without a permit as follows:

- 45,000kg (45 tonnes) for 7-axle combinations with a minimum wheelbase of 16.8m, and
- 46,000kg (46 tonnes) for 8-axle combinations with a minimum wheelbase of 17.4m.

Eligible vehicles operating at these limits have general access on all local roads and state highways, except where restrictions are posted.

**Legislation reference:** VDAM Rule section 4.3(1 1) and schedule 3, part 2, table 2.2.

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### Permits for local roads

If part of the route you require is on local roads, you need a separate permit from the local road controlling authority (RCA), unless the local RCA has delegated authority to Waka Kotahi to include its roads on a Waka Kotahi permit.

If your route involves both state highways and local roads, apply for a permit through Waka Kotahi, and permit issuing officers (PIOs) will help you coordinate acquiring permits for the local roads included in your route.

If, on the other hand, the whole of your proposed route is on local roads, contact the relevant local RCAs directly and find out how to apply for the local road permit(s) that you need.

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## D1.1 Definitions and general principles about HPMV higher mass permits continued

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### **Overlength permit**

An HPMV that exceeds standard mass limits as well as standard length requirements (generally if it is longer than 20 metres) needs an overlength permit in addition to a higher mass permit.

The higher mass permit and the overlength permit must both be carried in the vehicle and are viewed together as a single permit.

You can apply for both a higher mass permit and an overlength permit at the same time – see *Chapter D3: How to apply for an HPMV higher mass permit*.

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## D1.2 Axle weight flexibility

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### Why AWF?

Axle weight flexibility (AWF) gives operators of HPMVs more loading options while still ensuring the safety of road structures. It allows operators to manage loads that are difficult to distribute uniformly and precisely across all axles.

Axle weight flexibility reduces the risk of an operator receiving an infringement for a minor error in the accurate distribution of the load. Axle weight infringements account for a large proportion of all infringements issued.

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### Two types of AWF

When applying for an HPMV higher mass permit, operators can choose between two types of AWF:

- General access limits, or
- HPMV limits.

For guidance on which option to apply for, see section *D3.6 Determining axle weight flexibility type, total mass and individual axle masses*.

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### General access AWF requirements

These requirements apply to general access AWF:

- Individual axle masses and axle sets must not exceed the general access mass limits prescribed in the VDAM Rule schedule 3, part 1.
- Adjacent pairs of axle sets are limited to the general access mass limits prescribed in the VDAM Rule schedule 3, part 2.
- Groups of three or more axle sets are limited to the HPMV mass limits prescribed in the VDAM Rule schedule 3, part 4, and the total mass for the group must equal the sum of the individual axle weights applied for.
- The vehicle gross mass on the permit is restricted to the total mass the applicant has applied for, which must equal the sum of the individual axle masses applied for.

See *Example of general access AWF permit masses* in section D3.6.

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## D1.2 Axle weight flexibility continued

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### HPMV AWF requirements

These requirements apply to HPMV AWF:

- Individual axle weights must not exceed the HPMV mass limits prescribed in the VDAM Rule schedule 3, part 3.
- Adjacent pairs of axle sets and groups of axle sets are limited to the HPMV mass limits prescribed in the VDAM Rule schedule 3, part 4.
- The vehicle gross mass on the permit is restricted to the total mass the applicant has applied for, which must equal the sum of the individual axle masses applied for.

See *Example of HPMV AWF permit masses* in section D3.6 below.

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### Permit limits may be reduced

The mass limits on your permit may be less than the maximum general access or HPMV mass limits. During the permitting process, permitting staff may need to reduce the maximum limits to accommodate weak structures on your chosen route.

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### Reduced gross mass

AWF increases the load effects of vehicles on pavements and structures. The higher the masses for individual axles, the greater the load effects, particularly on short-span bridges.

If a route has restricted bridges, AWF may therefore result in a reduction in permitted gross mass to offset the increased load effects. However, if a route is unrestricted, AWF may not result in any reduction in gross mass.

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## D1.3 General access and HPMV permit mass limits tables

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### Introduction

The tables in this section show the general access and the HPMV permit mass limits that the in the VDAM Rule.

The tables from the VDAM Rule are reproduced side by side in this section to enable easy comparison of the different mass limits for individual axles, axle sets and axle groups as well as of the different axle and tyre type specifications.

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### Not a one-for-one match

General access and HPMV permit mass limits are not a one-for-one match.

Axle and tyre type specifications often differ between general access and HPMV permit mass limits. Some specifications and mass limits that apply to general access do not have an equivalent HPMV specification and mass limit, and vice versa.

It is therefore important to note the precise axle and tyre type specifications that apply to different mass limits.

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 1:  
Maximum  
mass on  
individual  
axles**

This table shows the maximum general access and HPMV permit mass limits on individual axles according to tyre type. A set of two axles less than 1 metre from the centre of the first to the centre of the last axle is counted as one axle.

**Legislation reference:** VDAM Rule schedule 3, part 1, table 1.1B (general access limits), and part 3, table 3.1 (HPMV limits).

GENERAL ACCESS		HPMV	
Type of axle	Mass limit	Type of axle	Mass limit
<i>Single standard tyres</i>	<i>kg</i>	<i>Single standard tyres</i>	<i>kg</i>
In a twin-steer axle set, or in a tandem axle set with a single large-tyred axle	5500	In a twin-steer axle set, or in a tandem axle set with a twin or single large-tyred axle	5500
In a tandem axle set with a twin-tyred axle:			
• in a passenger service vehicle	5800		
• in any other vehicle	5500		
In a tri-axle set	3000		
In any other axle set	6000	In any other axle set	6000
<i>Single large-tyred</i>	<i>kg</i>	<i>Single large-tyred</i>	<i>kg</i>
In a twin-steer axle set or a quad-axle set	5500	In a twin-steer axle set	5500
		In a quad-axle set	6000
In a tandem set with a single large-tyred axle or a single standard-tyred axle or in a tri-axle set	6600	In a tandem axle set with two single large-tyred axles or in a tandem axle set with a single standard-tyred axle or in a tri-axle set	6600
In any other axle set	7200	In any other axle set	7200

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 1: Maximum mass on individual axles (continued)**

GENERAL ACCESS		HPMV	
Type of axle	Mass limit	Type of axle	Mass limit
<i>Single mega-tyred</i>		<i>Single mega-tyred</i>	
In a twin-steer axle set	5500	In a twin-steer axle set	5500
In a single-steer axle set	7200	In a single-steer axle set	7200
In a quad-axle set	6000	In a quad-axle set	6000
In a tri-axle set	7000	In a tri-axle set	7000
In any other axle set	7600	In any other axle set	7600
<i>Twin-tyred</i>		<i>Twin-tyred</i>	
In a quad-axle set	6000	In a quad-axle set	6000
In a tri-axle set	7000	In a tri-axle set	7000
In a tandem axle set with a single standard-tyred axle:			
• in a passenger service vehicle	8700		
• in any other vehicle	8200		
In any other axle set:			
• in a public transport service bus	9000		
• in any other vehicle	8200	In any other axle set	8800

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 1: Maximum mass on individual axles (continued)**

GENERAL ACCESS		HPMV	
Type of axle	Mass limit	Type of axle	Mass limit
<i>Oscillating axle</i>	<i>kg</i>	<i>Oscillating axle</i>	
In any axle set	9500	In any axle set	9500

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 2:**  
**Maximum sum**  
**of axle mass on**  
**two axles in a**  
**tandem axle**  
**set**

The tables below show the maximum general access and HPMV permit sums of axle mass on two axles in a tandem axle set.

A tandem axle set consists of two axles that are at least 1 metre but no more than 2 metres from the centre of the first to the centre of the last axle.

The 2-metre maximum does not apply to twin-steer axle sets.

**Legislation reference:** VDAM Rule schedule 3, part 1, table 1.2 (general access limits), and part 3, table 3.2 (HPMV limits).

GENERAL ACCESS		HPMV	
Type of axles	Mass limit (kg)	Type of axles	Mass limit (kg)
Two single standard-tyred axles	11,000	Two single standard-tyred axles	11,000
<i>Two single large-tyred axles</i>		<i>Two single large-tyred axles</i>	
In a twin-steer axle set	11,000	In a twin-steer axle set	11,000
Not in a twin-steer axle set	13,000	Not in a twin-steer axle set	13,000
<i>Two single mega-tyred axles</i>		<i>Two single mega-tyred axles</i>	
In a twin-steer axle set	11,000	In a twin-steer axle set	11,000
Not in a twin-steer axle set	14,000	Not in a twin-steer axle set	14,000

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 2: Maximum sum of axle mass on two axles in a tandem axle set** (continued)

GENERAL ACCESS		HPMV	
Type of axles	Mass limit	Type of axles	Mass limit
<i>Two twin-tyred axles</i>		<i>Two twin-tyred axles</i>	
Spaced less than 1.3m from the first axle to the last axle	14,500	Spaced less than 1.3m from the first axle to the last axle	15,000
Spaced 1.3m or more but less than 1.8m from the first axle to the last axle	15,000	Spaced 1.3m or more from the first axle to the last axle	16,000
Spaced 1.8m or more from the first axle to the last axle	15,500		
<i>Twin-tyred axle</i>		<i>Twin-tyred axle</i>	
For a passenger service vehicle:			
<ul style="list-style-type: none"> <li>with a single standard-tyred axle and load share of 60/40, or</li> <li>with a single large-tyred axle or single mega-tyred axle and load share between 60/40 and 55/45</li> </ul>	14,500		
For any other vehicle:			
<ul style="list-style-type: none"> <li>with a single large-tyred axle or single mega-tyred axle and load share of 60/40</li> <li>with a single large-tyred axle or a single mega-tyred axle and load share of 55/45</li> </ul>	13,600	With a single large-tyred axle or a single mega-tyred axle and load share of 60/40	13,600
	14,500	With a single large-tyred axle or a single mega-tyred axle and load share of 55/45	14,500

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## D1.3 General access and HPMV permit mass limits tables continued

Table 2: Maximum sum of axle mass on two axles in a tandem axle set (continued)

GENERAL ACCESS		HPMV	
Type of axles	Mass limit	Type of axles	Mass limit
<i>Single standard-tyred axle</i>	<i>kg</i>	<i>Single standard-tyred axle</i>	<i>kg</i>
With an oscillating axle	13,000	With an oscillating axle	13,000
With a single large-tyred axle or a twin-tyred axle or a single mega-tyred axle	12,000	With a single large-tyred or a single mega-tyred axle	12,000
		With a twin-tyred axle	13,300
<i>Other combinations</i>	<i>kg</i>	<i>Two oscillating axles</i>	<i>kg</i>
Two oscillating axles	15,000	Spaced less than 1.3m from the first axle to the last axle	15,000
		Spaced 1.3m or more from the first axle to the last axle	16,000

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 3:**  
**Maximum sum**  
**of axle mass on**  
**a tri-axle set**

This table shows the maximum general access and HPMV permit sum of axle mass on a tri-axle set.

A tri-axle set consists of three axles where:

- the axles are spaced at least 2 metres (or 1.8 metres in the case of a single standard-tyred axle) but no more than 3 metres from the centre of the first to the centre of the last axle, and
- all axles contain an equal number of tyres.

**Legislation reference:** VDAM Rule schedule 3, part 1, table 1.3 (general access limits), and part 3, table 3.3 (HPMV limits).

GENERAL ACCESS		HPMV	
Type of axles	Mass limit	Type of axles	Mass limit
<i>Three oscillating axles, three twin-tyred axles, three single large-tyred axles, or three single mega-tyred axles</i>	<i>kg</i>	<i>Three oscillating axles, three twin-tyred axles, three single large-tyred axles, or three single mega-tyred axles</i>	<i>kg</i>
Spaced 2m or more but less than 2.4m from the first axle to the last axle	16,000	Spaced 2m or more but less than 2.4m from the first axle to the last axle	16,000
Spaced 2.4m or more but less than 2.5m from the first axle to the last axle	17,500	Spaced 2.4m or more but less than 2.5m from the first axle to the last axle	18,000
Spaced 2.5m or more from the first axle to the last axle	18,000	Spaced 2.5m or more from the first axle to the last axle	19,000
<i>Three single standard-tyred axles</i>	<i>kg</i>		
Spaced 1.8m or more and less than 3m from the first axle to the last axle	8200		

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 4:**  
**Maximum sum**  
**of axle mass on**  
**a quad-axle set**

This table shows the maximum general access and HPMV permit sum of axle mass on a quad-axle set.

A quad-axle set consists of four axles where:

- the axles are spaced at least 3.75 metres and no more than 4 metres from the centre of the first to the centre of the last axle
- all axles contain an equal number of tyres, and
- none of the axles is a single standard-tyred axle.

**Legislation reference:** VDAM Rule schedule 3, part 1, table 1.4 (general access limits), and part 3, table 3.4 (HPMV limits).

GENERAL ACCESS	
Type of axles	Mass limit
<i>Quad-axle set with...</i>	<i>kg</i>
Four twin-tyred axles	20,000
Four single large-tyred axles	
Four single mega-tyred axles	

HPMV	
Type of axles	Mass limit
<i>Quad-axle set with...</i>	<i>kg</i>
Twin-tyred axles	22,000
Single large-tyred axles	
Single mega-tyred axles	
Oscillating axles with at least one steering axle	

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 5:**  
**Maximum sum of axle mass on any two or more axles not otherwise described**

This table shows the maximum general access and HPMV permit sum of mass on any two or more axles that together do not constitute a single tandem axle set, a single tri-axle set or a single quad-axle set, where the distance from the centre of the first axle to the centre of the last axle is 1.0 metre or more but less than 1.8 metres (including maximum gross mass).

**Legislation reference:** VDAM Rule schedule 3, part 1, table 1.5 (general access limits), and part 3, table 3.5 (HPMV limits).

GENERAL ACCESS		HPMV	
Type of axles	Mass limit (kg)	Type of axles	Mass limit (kg)
Two single standard-tyred axles	11,000	Two single standard-tyred axles	11,000
Two single large-tyred axles	12,000	Two single large-tyred axles	12,000
		Two single mega-tyred axles	13,000
A single standard-tyred axle with a single large-tyred axle, single mega-tyred axle or a twin-tyred axle	12,000	A single standard-tyred axle with a single large-tyred axle, single mega-tyred axle or a twin-tyred axle	12,000
Any other two or more axles	14,500	Any other two or more axles	14,500

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## D1.3 General access and HPMV permit mass limits tables continued

**Table 6:  
Maximum total  
mass limits**

This table shows the maximum sum of mass allowed for general access and under an HPMV higher mass permit on any two or more axles that together do not constitute a single tandem axle set, single tri-axle set or single quad-axle set, where the distance from the centre of the first axle to the centre of the last axle is 1.8 metres or more (including maximum gross mass).

**Legislation reference:** VDAM Rule schedule 3, part 2, table 2.1 (general access limits) and part 4 (HPMV limits).

GENERAL ACCESS		HPMV	
Distance from the centre of the first to the centre of the last axle	Mass limit (kg)	Distance from the centre of the first to the centre of the last axle	Mass limit (kg)
1.8m but less than 2.5m	15,500	1.8m but less than 2.0m	15,500
		2.0m but less than 2.5m	16,000
2.5m but less than 3.0m	17,500	2.5m but less than 3.0m	17,500
3.0m but less than 3.3m	19,000	3.0m but less than 3.3m	19,000
3.3m but less than 3.6m	20,000	3.3m but less than 3.6m	20,000
3.6m but less than 4.0m	21,000	3.6m but less than 4.0m	21,000
4.0m but less than 4.4m	22,000	4.0m but less than 4.4m	22,000
4.4m but less than 4.7m	23,000	4.4m but less than 4.5m	23,000
		4.5m but less than 4.7m	23,500
4.7m but less than 5.1m	24,000	4.7m but less than 5.0m	24,000
5.1m but less than 5.4m	25,000	5.0m but less than 5.4m	25,000

*Continued on next page*

## D1.3 General access and HPMV permit mass limits tables continued

**Table 6: Maximum total mass limits (continued)**

GENERAL ACCESS		HPMV	
Distance from the centre of the first to the centre of the last axle	Mass limit (kg)	Distance from the centre of the first to the centre of the last axle	Mass limit (kg)
5.4m but less than 5.8m	26,000	5.4m but less than 5.5m	26,000
		5.5m but less than 5.8m	26,500
5.8m but less than 6.4m	27,000	5.8m but less than 6.0m	27,000
6.4m but less than 7.0m	28,000	6.0m but less than 6.5m	28,000
7.0m but less than 7.6m	29,000	6.5m but less than 7.0m	29,500
7.6m but less than 8.2m	30,000		
8.2m but less than 8.8m	31,000	7.0m but less than 7.5m	31,000
8.8m but less than 9.4m	32,000	7.5m but less than 8.0m	32,500
9.4m but less than 10.0m	33,000		
10.0m but less than 10.8m	34,000	8.0m but less than 8.5m	34,000
10.8m but less than 11.6m	35,000	8.5m but less than 9.0m	35,000
11.6m but less than 12.0m	36,000	9.0m but less than 9.5m	36,000
12.0m but less than 12.5m	37,000	9.5m but less than 10.0m	37,000
12.5m but less than 13.2m	38,000	10.0m but less than 10.5m	38,000
13.2m but less than 14.0m	39,000	10.5m but less than 11.0m	39,000

*Continued on next page*

## D1.3 General access and HPMV permit mass limits tables continued

**Table 6: Maximum total mass limits (continued)**

GENERAL ACCESS		HPMV	
Distance from the centre of the first to the centre of the last axle	Mass limit (kg)	Distance from the centre of the first to the centre of the last axle	Mass limit (kg)
14.0m but less than 14.8m	40,000	11.0m but less than 11.5m	40,000
14.8m but less than 15.2m	41,000	11.5m but less than 12.0m	41,000
15.2m but less than 15.6m	42,000	12.0m but less than 12.5m	42,000
15.6m but less than 16.0m	43,000	12.5m but less than 13.0m	43,000
16.0m or more	44,000	13.0m but less than 13.5m	44,000
<b>Note:</b> For 45/46t general access mass limits for heavy motor vehicles with at least seven axles and a minimum wheelbase of 16.8 metres, see Table 7 below.		13.5m but less than 14.0m	45,000
		14.0m but less than 14.5m	46,000
		14.5m but less than 15.0m	47,000
		15.0m but less than 15.5m	48,000
		15.5m but less than 16.0m	49,000
		16.0m but less than 16.5m	50,000
		16.5m but less than 17.0m	51,000
		17.0m but less than 17.5m	52,000
		17.5m but less than 18.0m	53,000

*Continued on next page*

## D1.3 General access and HPMV permit mass limits tables continued

**Table 6: Maximum total mass limits (continued)**

GENERAL ACCESS	
Distance from the centre of the first to the centre of the last axle	Mass limit (kg)
N/A	

HPMV	
Distance from the centre of the first to the centre of the last axle	Mass limit (kg)
18.0m but less than 18.5m	54,000
18.5m but less than 19.0m	55,000
19.0m but less than 19.5m	56,000
19.5m but less than 20.0m	57,000
20.0m but less than 20.5m	58,000
20.5m but less than 21.0m	59,000
21.0m but less than 21.5m	60,000
21.5m but less than 22.0m	61,000
22.0m or more <sup>1</sup>	62,000 or more <sup>1</sup>

**Note:**

1. For distances of more than 22 metres, the maximum allowed mass for a vehicle combination above 62,000kg increases by 1000kg for each 0.5 metre in distance.

*Continued on next page*

## D1.3 General access and HPMV permit mass limits tables continued

**Table 7:**  
**45/46t general  
access mass  
limits**

This table shows the maximum general access gross mass limits for heavy motor vehicles with at least seven axles and a minimum wheelbase of 16.8 metres.

**Legislation reference:** VDAM Rule schedule 3, part 2, table 2.2.

Axle requirements	Mass limit (kg)
<i>Distance from the centre of the first axle to the centre of the last axle:</i>	
16.8m or more, and a minimum of 7 axles	45,000
17.4m or more, and a minimum of 8 axles	46,000

## D1.4 'H' sign requirements and specifications

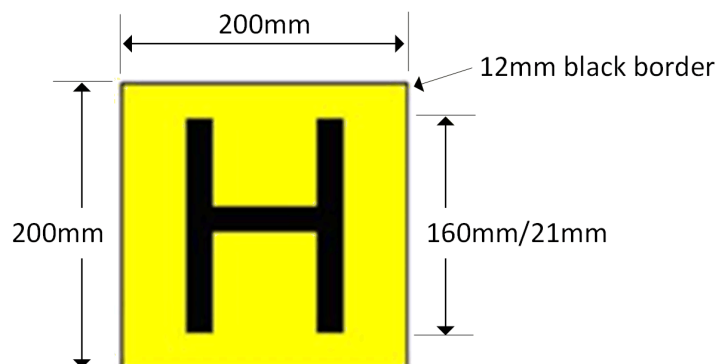
### When an 'H' sign must be displayed

While operating under an HPMV permit that specifies particular roads on which the vehicle may operate, the vehicle must display the high-productivity motor vehicle sign (the 'H' sign).

A vehicle that does not have an HPMV permit must not display the 'H' sign.

### 'H' sign specifications

#### Required size



#### Specifications

The 'H' sign must comply with *AS/NZS 1906.1:2017, Retroreflective materials and devices for road traffic control purposes, Part 1: Retroreflective sheeting*. Existing or older signs must comply with a previous version of this standard.

### Placement of 'H' sign

The 'H' sign must be mounted on the front and rear of an HPMV so that it can be clearly seen by other drivers.

It should not be displayed in the windscreen.

### Signage when load is reduced

If an HPMV with a higher mass permit carries a load within general access mass limits, then the 'H' sign may be removed but does not have to be.

However, if the vehicle is a non pro-forma overlength vehicle and operates on a route-specific permit, the sign must remain in place at all times.

### Not required to display 'H' sign

Overlength HPMVs on a general access permit are not required to display the 'H' sign unless they are also operating on a higher mass permit.

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# Chapter D2: Vehicle requirements for HPMV higher mass permits

## Overview

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### About this chapter

This chapter describes eligible and ineligible vehicle designs for HPMV higher mass permits. It also explains vehicle stability requirements and how Waka Kotahi assesses vehicle safety as part of the higher mass permitting process.

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### In this chapter

This chapter contains the following sections:

Section	See page
D2.1 Ineligible vehicle designs for HPMV higher mass permits	D2-2
D2.2 Eligible vehicle designs for HPMV higher mass permits (and their maximum RUC weights)	D2-4
D2.3 HPMV roll stability requirements	D2-11
D2.4 Vehicle attributes check	D2-12

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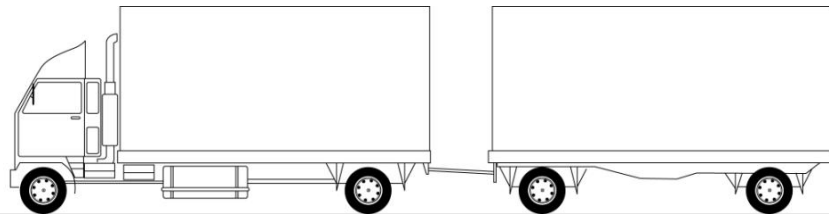
## D2.1 Ineligible vehicle designs for HPMV higher mass permits

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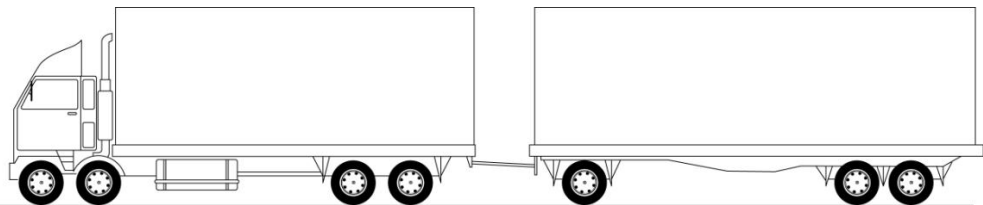
**Introduction** This section shows vehicle designs that are **ineligible** for HPMV higher mass permits.

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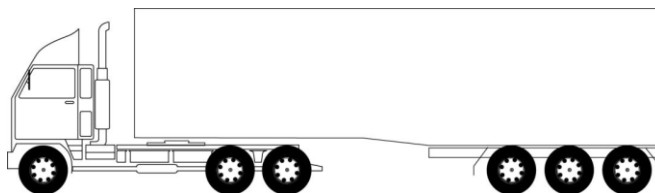
**R11T11 ineligible** This vehicle design (R11T11) is ineligible for an HPMV higher mass permit because it has an insufficient number of axles to exceed 44,000kg.



**R22T12 ineligible** This vehicle design (R22T12) is ineligible for an HPMV higher mass permit because it has an insufficient number of axles on the trailer.



**A123 ineligible** This vehicle design (A123) is ineligible for an HPMV because it has an insufficient number of axles to exceed 44,000kg.



*Continued on next page*

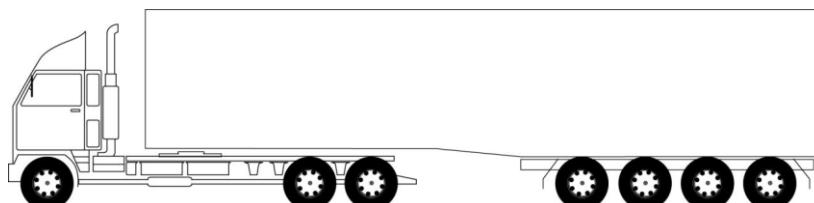


## D2.1 Ineligible vehicle designs for HPMV higher mass permits continued

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### A124 may be ineligible

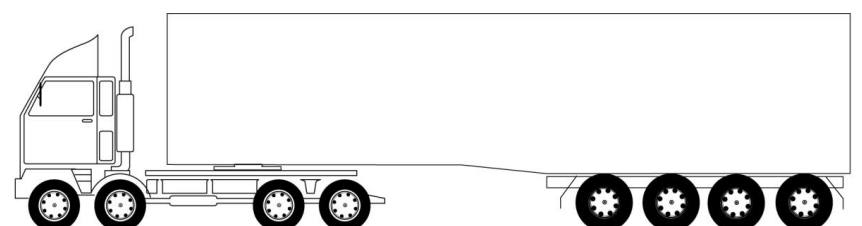
This vehicle design (A124) is ineligible for an HPMV higher mass permit if there are **two** steer axles in the quad set.



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### A224 may be ineligible

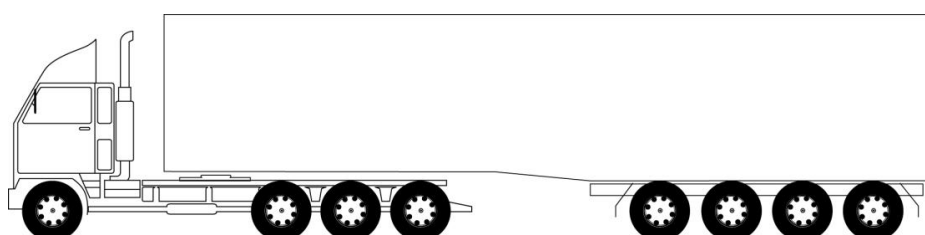
This vehicle design (A224) is ineligible for an HPMV higher mass permit if there are **two** steer axles in the quad set.



---

### A134 may be ineligible

This vehicle design (A134) is ineligible for an HPMV higher mass permit if there are **two** steer axles in the quad set.



## D2.2 Eligible vehicle designs for HPMV higher mass permits (and their maximum RUC weights)

**Introduction** This section shows the common designs for heavy vehicle combinations that are eligible for HPMV higher mass and/or non pro-forma overlength permits.

**Note:** Non pro-forma overlength designs have specific requirements and are only granted permits in exceptional circumstances. For details see *Part E: HPMV overlength permits* in this volume.

**RUC information** The diagrams in this section also show the maximum road user charges (RUC) weight limits for H type RUC licences for the combinations shown.

**Legislation references:**

- Road User Charges Regulations 2012, schedule, part 1 and part 2, and
- Road User Charges Rates Regulations 2015, schedule 4.

**Note:** In addition to the rates specified in the regulations, Waka Kotahi as the RUC collector may assess vehicles for special rates under section 90A of the Road User Charges Act 2012.

**Overlength and 50MAX pro-formas**

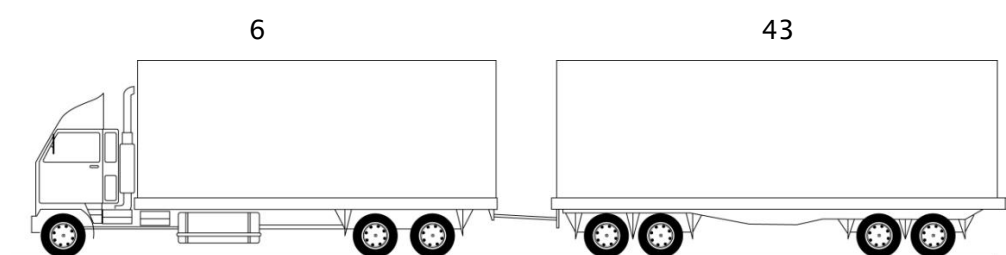
See also in this volume:

- section *E1.2 Pro-forma overlength designs*, and
- section *F1.1 HPMV 50MAX vehicle requirements*.

**R12T22**

7 axles

*RUC vehicle type numbers:*



Type H vehicle type number	Maximum RUC weight
H74	53,000kg

*Continued on next page*

## D2.2 Eligible vehicle designs for HPMV higher mass permits (and their maximum RUC weights) continued

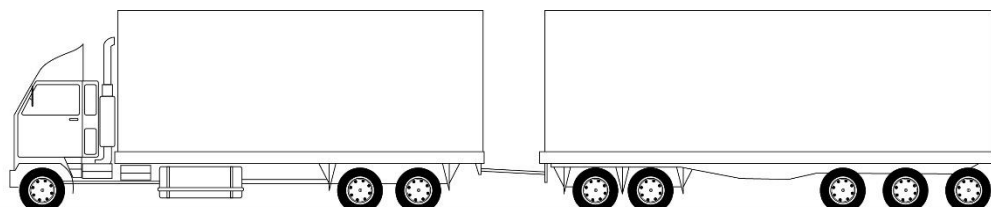
R12T23

*RUC vehicle type numbers:*

8 axles

6

951



Type H vehicle type number	Maximum RUC weight
H76	53,000kg

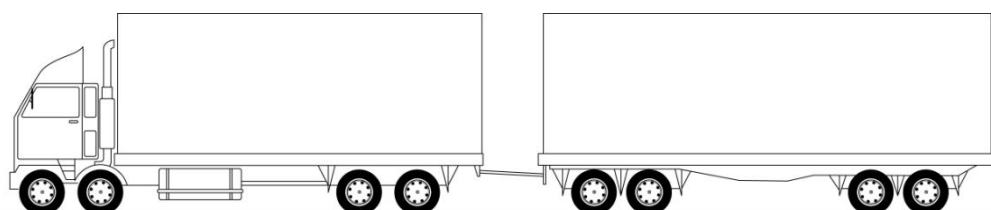
R22T22

*RUC vehicle type numbers:*

8 axles

14

43



Type H vehicle type number	Maximum RUC weight
H83	58,000kg

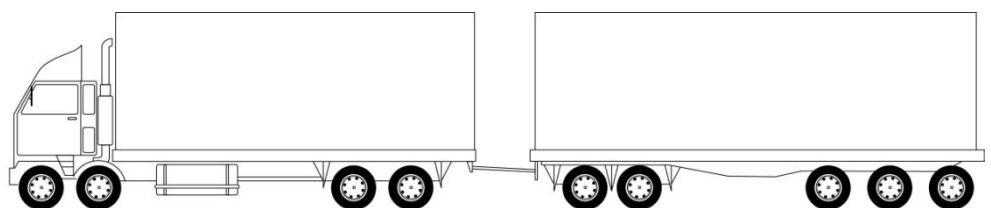
R22T23

*RUC vehicle type numbers:*

9 axles

14

951



Type H vehicle type number	Maximum RUC weight
H63	62,000kg

*Continued on next page*

## D2.2 Eligible vehicle designs for HPMV higher mass permits (and their maximum RUC weights) continued

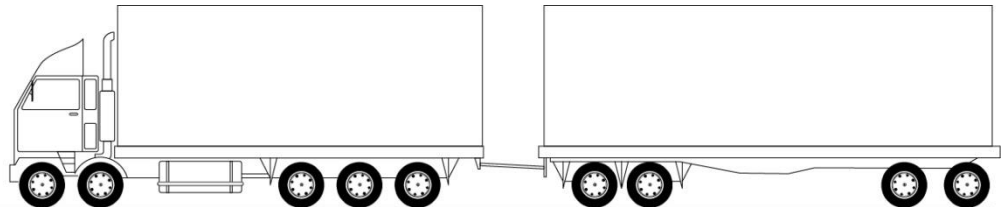
R23T22

9 axles

RUC vehicle type numbers:

19

43



Type H vehicle type number	Maximum RUC weight
H93	58,000kg

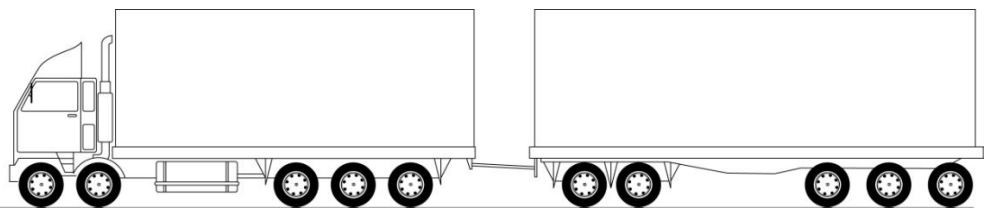
R23T23

10 axles

RUC vehicle type numbers:

19

951



Type H vehicle type number	Maximum RUC weight
H38	63,000kg

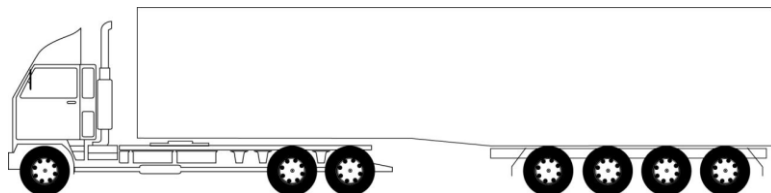
A124

7 axles

RUC vehicle type numbers:

6

43



**Note:** This design is eligible if there is only one steering axle in the quad set.

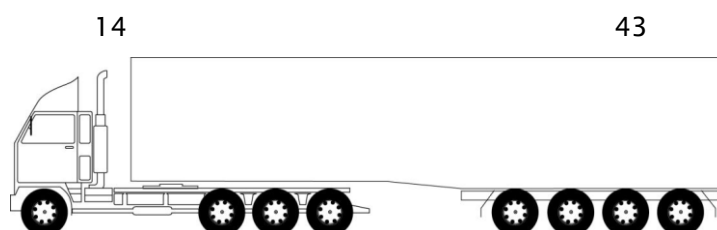
Type H vehicle type number	Maximum RUC weight
H74	53,000kg

*Continued on next page*

## D2.2 Eligible vehicle designs for HPMV higher mass permits (and their maximum RUC weights) continued

A134

8 axles

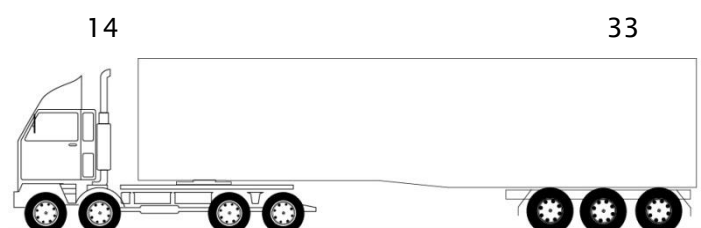
*RUC vehicle type numbers:*

**Note:** This design is eligible if there is only one steering axle in the quad set.

Type H vehicle type number	Maximum RUC weight
H83	58,000kg

A223

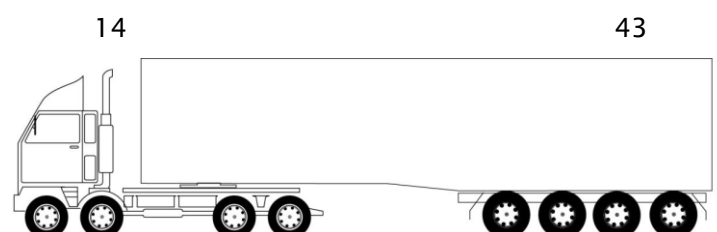
7 axles

*RUC vehicle type numbers:*

Type H vehicle type number	Maximum RUC weight
H77	48,000kg

A224

8 axles

*RUC vehicle type numbers:*

**Note:** This design is eligible if there is only one steering axle in the quad set.

Type H vehicle type number	Maximum RUC weight
H83	58,000kg

*Continued on next page*

## D2.2 Eligible vehicle designs for HPMV higher mass permits (and their maximum RUC weights) continued

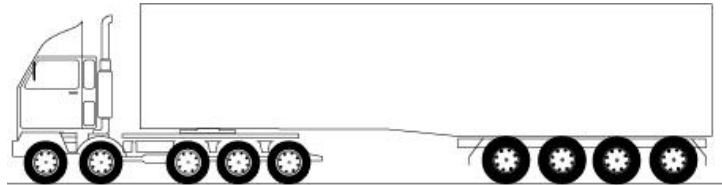
**A234**

9 axles

*RUC vehicle type numbers:*

19

43



**Note:** This design is eligible if there is only one steering axle in the quad set.

Type H vehicle type number	Maximum RUC weight
H93	58,000kg

**B1222**

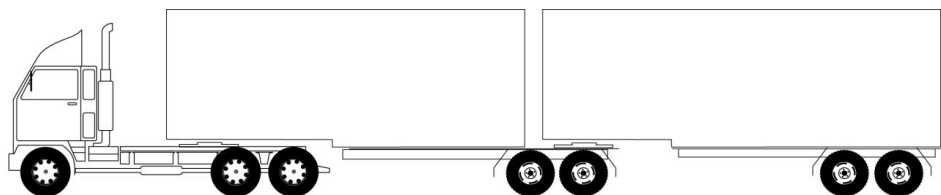
7 axles

*RUC vehicle type numbers:*

6

929

29



Type H vehicle type number	Maximum RUC weight
H79	52,000kg

**B1232**

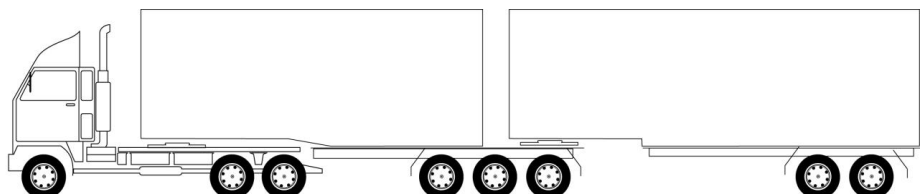
8 axles

*RUC vehicle type numbers:*

6

939

29



Type H vehicle type number	Maximum RUC weight
H85	53,000kg

*Continued on next page*



## D2.2 Eligible vehicle designs for HPMV higher mass permits (and their maximum RUC weights) continued

**B2232**

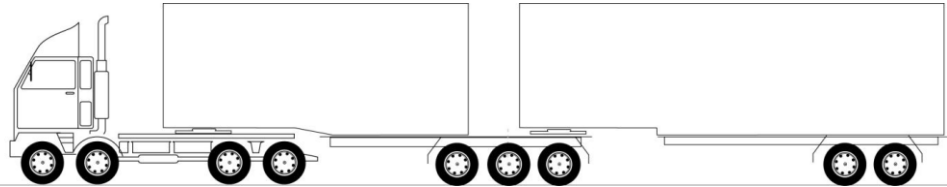
9 axles

*RUC vehicle type numbers:*

14

939

29



Type H vehicle type number	Maximum RUC weight
H35	58,000kg

**B2233**

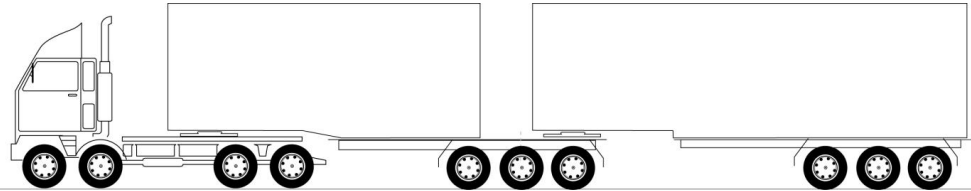
10 axles

*RUC vehicle type numbers:*

14

939

33



Type H vehicle type number	Maximum RUC weight
H13	62,000kg <sup>1</sup>

**Note:** The maximum RUC weight for this combination is 63,000kg, but a permit may only be issued for that weight in exceptional cases and depending on the specific vehicle configuration.



---

## D2.3 HPMV roll stability requirements

---

### Roll stability and SRT requirements

HPMV's must have roll stability control fitted and activated on trailers:

- fitted with EBS brakes, or
- first registered after 1 May 2010.

Trailers with activated roll stability control must meet a minimum static roll threshold (SRT) of 0.35g.

Trailers that do not have EBS and roll stability control may be eligible for HPMV permits if they have a minimum SRT of 0.4g and were first registered:

- before 1 May 2010, or
- before 1 April 2016 if they are log trailers carting round wood.

If the load is a closed container, the SRT compliance certificate must specify uniform density.

Mixed freight may be used only if the load is visible and the status can be verified.

---

### SRT certification requirements

Trailers with a gross vehicle mass above 10 tonnes (class TD) and a body or load height of more than 2.8 metres must have an SRT compliance certificate. The SRT compliance certificate must be:

- carried together with the HPMV permit, and
  - shown to enforcement officers on request.
- 

### SRT certificate with permit application

An SRT compliance certificate must be submitted together with an HPMV permit application for any vehicle units with an attributes check sheet pre-dating version 5 or 5A (see the next section *D2.4 Vehicle attributes check*).

---

## D2.4 Vehicle attributes check

---

**Introduction** This section describes how Waka Kotahi assesses vehicle safety for HPMV higher mass permits.

Road controlling authorities are required by the VDAM Rule to consider (among other factors) the safety of vehicles before issuing permits for exceeding mass limits.

---

**Attributes check sheets** As part of the permit application process, operators must have their vehicles assessed by an approved heavy vehicle specialist certifier (see *Approved certifiers* below).

Certifiers must complete and sign an 'attributes check sheet' issued by Waka Kotahi. There are two types of attributes check sheet:

- a 'High Productivity Motor Vehicle/ISO Permit Attributes Check Sheet', which must be completed for each unit of the vehicle combination applied for, or
- a '50MAX High Productivity Combination Motor Vehicle Attributes Check Sheet', which covers all vehicle units in a combination.

Certifiers must ensure they use the current and correct attributes check sheet template issued by Waka Kotahi.

Permit applicants must submit the attributes check sheets together with the application (see *Chapter D3: How to apply for an HPMV higher mass permit*).

---

**What do certifiers assess?**

When completing the HPMV attributes check sheet, certifiers assess whether a vehicle is technically capable of carrying a heavier load within its certifications or manufacturer's design limits. They check that a vehicle meets requirements for the following:

- gross vehicle mass
  - gross combination mass (where applicable)
  - brake capacity
  - draw bar rating and draw beam rating (where applicable)
  - 5th wheel mount rating (where applicable)
  - maximum front axle group mass (or rating at kingpin)
  - maximum rear axle group mass
  - maximum towed mass braked (where applicable)
- 

*Continued on next page*

## D2.4 Vehicle attributes check continued

### What do certifiers assess?

(continued)

- tyre sizes and ratings
- roll stability control, and
- any modifications made to the truck frontal protection (or whether modifications are approved by the original truck manufacturer).

**Note:** The certifier signing the attributes check sheet is responsible for ensuring that all required information is included.

### What does Waka Kotahi check?

When processing a permit application, Waka Kotahi checks that the mass applied for does not exceed the lowest of any of the vehicle's safe design limits, as stated on the vehicle's attributes check sheet.

### Static roll threshold (SRT)

The attributes check also assesses whether the vehicle is required to have a static roll threshold (SRT) of 0.35g or 0.4g (trailers without EBS and roll stability control – see section *D2.3 HPMV roll stability requirements*).

If the load is a closed container, the SRT compliance certificate must specify uniform density.

Mixed freight may be used only if the load is visible and the status can be verified.

### Dimensional accuracy

Dimensional accuracy is the operator's responsibility. You must therefore ensure you provide accurate vehicle dimensions on the permit application form.

Also see sections *D3.2 Applying for multiple identical vehicles* and *D3.3 How to measure axle spacings*.

### Approved certifiers

The vehicle attributes checks must be carried out by a Waka Kotahi approved heavy vehicle specialist certifier. Approved certifiers are listed on Waka Kotahi's website at [www.nzta.govt.nz/resources/heavy-vehicle-specialist-certifiers](http://www.nzta.govt.nz/resources/heavy-vehicle-specialist-certifiers).



# Chapter D3: How to apply for an HPMV higher mass permit

## Overview

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### About this chapter

This chapter describes how to apply for an HPMV higher mass permit.

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### In this chapter

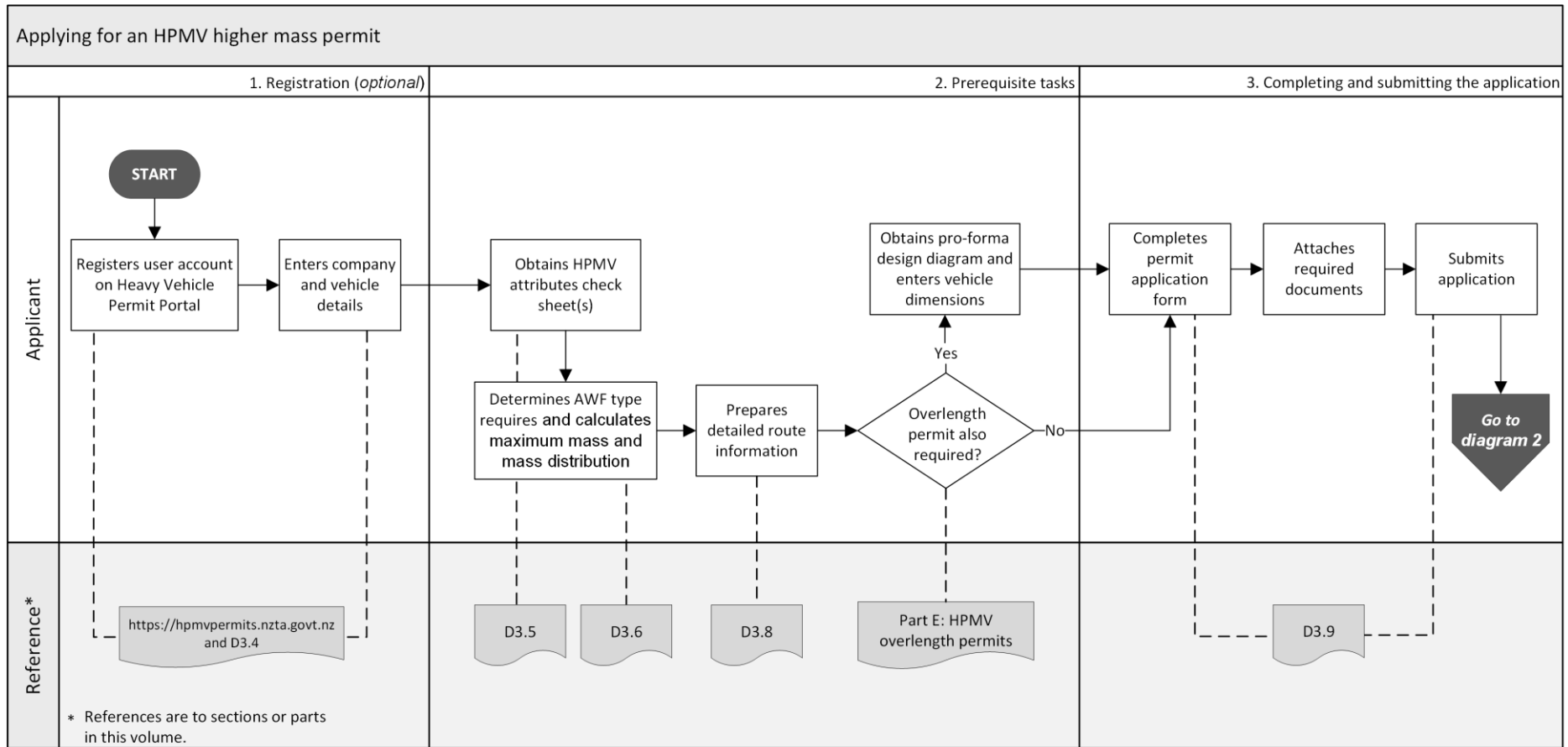
This chapter contains the following sections:

Section	See page
D3.1 Overview diagrams of the higher mass permitting process	D3-2
D3.2 Applying for multiple identical vehicles	D3-4
D3.3 How to measure axle spacings	D3-5
D3.4 Before you apply for an HPMV higher mass permit	D3-7
D3.5 Obtaining required documents	D3-8
D3.6 Determining axle weight flexibility type, total mass and individual axle masses	D3-10
D3.7 Gathering required company and vehicle information	D3-16
D3.8 Preparing route information	D3-17
D3.9 Completing and submitting the application form	D3-18
D3.10 Renewing an HPMV higher mass permit	D3-20
D3.11 Permit fee and processing time	D3-22

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## D3.1 Overview diagrams of the higher mass permitting process

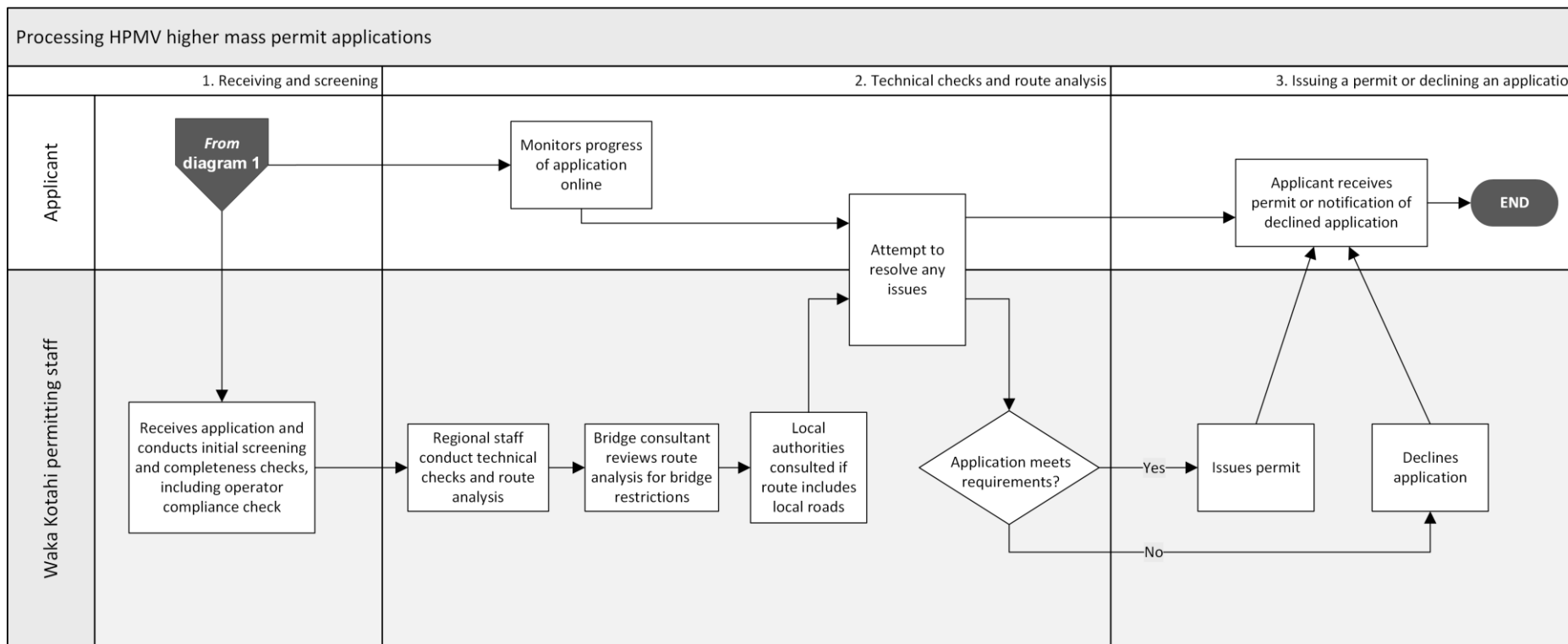
**Diagram 1** This diagram shows the steps involved in applying for an HPMV higher mass permit.



Continued on next page

## D3.1 Overview diagrams of the higher mass permitting process continued

**Diagram 2** This diagram gives a high level overview of how an HPMV higher mass permit application is processed.



## D3.2 Applying for multiple identical vehicles

---

**Introduction** You may apply for an HPMV higher mass permit for multiple **identical** vehicles on the same application form. This section explains the requirements that must be met for vehicles to be considered identical.

---

**Number of vehicles per application** You can apply for one prime mover per application, and for up to five identical trailer units per application.

---

**Requirements** To be considered identical, units must meet the following requirements:

- Units must have:
  - identical axle spacings
  - the same tyre size, and
  - identical inner and outer wheel tracks.
- All units in the combination (including the prime mover) must have, for the load applied for, sufficient:
  - GVM
  - axle ratings
  - maximum towed mass (MTM), GCM, 5th wheel, tow ball ratings, etc, where applicable\*, and
  - brake capacity.

\* For example, if there is no 5th wheel fitted, there is no reason to have a 5th wheel rating.

---

**Enforcement of identical vehicle criteria** Axle spacings on a permit will be enforced by the Commercial Vehicle Safety Team (CVST) of the New Zealand Police. Breaches may result in fines. It is therefore important that you provide accurate measurements on your permit application. See section *D3.3 How to measure axle spacings*.

---



## D3.3 How to measure axle spacings

**Introduction** This section describes how to measure the distances between axles (axle spacings) as recommended by Waka Kotahi and the Commercial Vehicle Safety Team (CVST) of the New Zealand Police.

It is critical to correctly measure axle spacings when applying for a permit.

The axle spacings for a vehicle combination are recorded in permits for exceeding mass limits and enforced by the CVST.

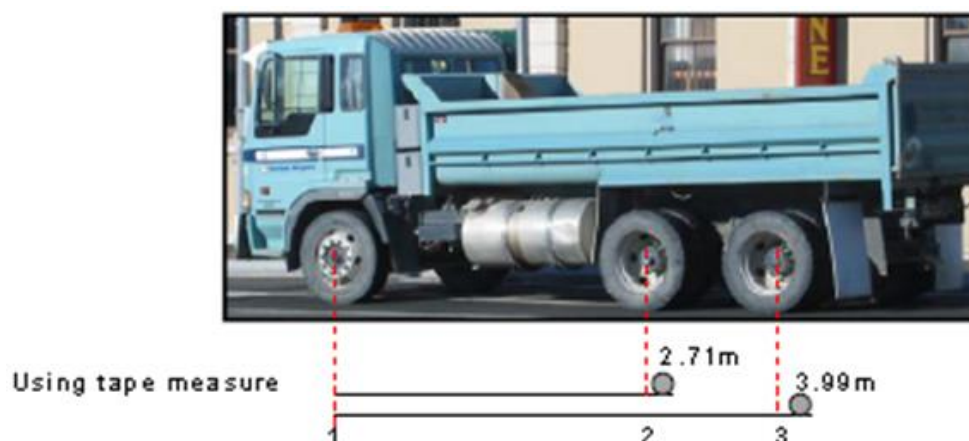
**Measure laden vehicle** Axle spacings may differ depending on the load of the vehicle because of changes in suspension travel.

Because enforcement scrutiny will be on the laden vehicle, Waka Kotahi advises operators to measure axle spacings on a fully laden vehicle.

**Guidelines for measuring** To ensure accurate measurements, follow these guidelines when measuring axle spacings:

1. Arrange to have two people available for measuring.
2. Measure from the centre of the first axle to the centre of the last axle.
3. Measure down the left-hand side of the vehicle or vehicle combination (this is standard CVST practice).
4. Record the distance measured in metres to **two** decimal places (eg 14.32m).
5. You may derive spacings by calculation, as explained in the example below.

**Example** This image illustrates the measured axle spacings of a three-axle truck.



*Continued on next page*

## D3.3 How to measure axle spacings continued

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**Example**

(continued)

***Measured spacings***

Distance from first to second axle: 2.71 m

Distance from first to third axle: 3.99 m

***Derived spacing***

With the above measured values, you can derive the spacing between the second and the third axle by calculation, as follows:

Distance from second to third axle:  $3.99\text{m} - 2.71\text{m} = 1.28\text{m}$

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## D3.4 Before you apply for an HPMV higher mass permit

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**Introduction** This section gives an overview of the information you need to gather and the tasks you need to do before you complete the application form for an HPMV higher mass permit.

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**Do you have an eligible vehicle?** Not all heavy vehicle designs are eligible for an HPMV permit. For eligible designs and other vehicle requirements, see *Chapter D2: Vehicle requirements for HPMV higher mass permits*.

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**Registering on the permit portal** It is not mandatory to register a user account on Waka Kotahi's 'Heavy Vehicle Permit Portal' to apply for HPMV permits. But if you regularly need permits, then registration on the portal will streamline the application process and save you time.

As a registered user, you can:

- reuse company and vehicle information
- complete applications in stages and save drafts
- monitor the progress of your applications, and
- look up previous applications.

For help with using the permit portal, refer to the portal user guide at <https://hpmvpermits.nzta.govt.nz/home/information>.

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**Prerequisite tasks before you apply** It is advisable to have all required information and documents at hand when completing the application form. Unless you are a registered user (see above), you will not be able to save drafts of your application if you have missing information.

It is therefore recommended you complete the following prerequisite tasks:

1. Obtain the required documents.
2. Determine the axle weight flexibility (AWF) type, total mass and individual axle masses to apply for.
3. Gather the required company and vehicle information.
4. Prepare route information.

These tasks are described in more detail in the following sections.

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## D3.5 Obtaining required documents

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### Required documentation

The following documents are required with an HPMV higher mass permit application:

1. an HPMV attributes check sheet **for each vehicle unit**, or a 50MAX combination attributes check sheet
  2. Electronic copies of SRT compliance certificates (if required)
  3. A pro-forma design diagram for your vehicle if you are also applying for an overlength permit.
- 

### 1. Obtaining HPMV attributes check sheets

You must attach a separate HPMV attributes check sheet for each vehicle unit with your application.

A 50MAX combination attributes check sheet is also acceptable.

#### ***Where to get HPMV attributes check sheets***

You can obtain attributes check sheets from Waka Kotahi approved heavy vehicle specialist certifiers. The sheets must be completed and signed by a specialist certifier to demonstrate that all vehicle units meet safety requirements.

A list of Waka Kotahi approved heavy vehicle specialist certifiers can be found at [www.nzta.govt.nz/resources/heavy-vehicle-specialist-certifiers/](http://www.nzta.govt.nz/resources/heavy-vehicle-specialist-certifiers/).

For details on what certifiers assess, see section *D2.4 Vehicle attributes check*.

---

### 2. Obtaining electronic copies of SRT compliance certificates

If you are using the 'High Productivity Motor Vehicle/ISO Permit' attributes check sheets for individual vehicle units with your permit application, refer to the version number on the attributes check sheets.

If the version is older than version 5 or 5A, you must also submit electronic copies of the SRT compliance certificates for the trailer(s) with your HPMV permit application in addition to the attributes check sheets.

This is required because older attributes check sheets do not contain SRT information.

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*Continued on next page*

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## D3.5 Obtaining required documents continued

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### 3. Obtaining a pro-forma design diagram

You generally need an HPMV overlength permit as well as a higher mass permit if your vehicle is longer than 20 metres.

You can apply for the overlength permit at the same time as applying for the higher mass permit.

If you are also applying for an overlength permit, you must attach a diagram of the relevant overlength pro-forma design with the dimensions of your vehicle to your application.

Overlength pro-forma vehicle design diagrams can be downloaded from [www.nzta.govt.nz/commercial-driving/high-productivity/proforma-designs-for-high-productivity-motor-vehicles](http://www.nzta.govt.nz/commercial-driving/high-productivity/proforma-designs-for-high-productivity-motor-vehicles).

**Note:** Overlength vehicles that do not conform to an approved pro-forma design are only eligible for a permit in exceptional circumstances and are assessed on a case-by-case basis. For details see section *Part E: HPMV overlength permits* in this volume.

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## D3.6 Determining axle weight flexibility type, total mass and individual axle masses

### Introduction

This section describes what to consider when:

- determining which axle weight flexibility (AWF) option to choose, and
- calculating the total mass and individual axle masses to apply for.

### Two AWF options

When applying for an HPMV higher mass permit, operators must choose between two options of axle weight flexibility (AWF):

- general access mass limits, or
- HPMV permit mass limits.

Refer to this table for guidance on which AWF option to choose:

If...	Then you should apply for...
<ul style="list-style-type: none"> <li>• your load can be distributed relatively accurately, and</li> <li>• you want to maximise gross mass</li> </ul>	general access AWF
<ul style="list-style-type: none"> <li>• you need maximum loading flexibility, and/or</li> <li>• there are no restricted bridges on your route (which may reduce the gross mass you wish to carry)</li> </ul>	HPMV AWF

**Note:** Axle weight flexibility is not available for the first axle set of the prime mover.

### Determining total mass and axle masses

On the application form for an HPMV higher mass permit, you must enter the total gross mass you wish to apply for as well as the actual operational weights on individual axles.

The individual axle masses you enter on the application form must add up to the total gross mass you apply for.

**Note:** The mass limits on the permit for groups of three or more axle sets will also be limited to the sum of the application weights for the individual axles in the group.

*Continued on next page*

## D3.6 Determining axle weight flexibility type, total mass and individual axle masses continued

### Determining total mass and axle masses (continued)

Refer to the table below for the applicable mass limits depending on the AWF option you select.

Also see the examples of application and permit masses on the following pages.

AWF option	Applies to...	Applicable limits in VDAM Rule schedule 3	Or see section...
General access	<ul style="list-style-type: none"> <li>Individual axles</li> <li>Axle sets</li> <li>Pairs of axle sets</li> </ul>	Parts 1 and 2 (General access limits)	<i>D1.3 General access and HPMV permit mass limits tables</i> Tables 1 to 5 (General access limits)
	<ul style="list-style-type: none"> <li>Groups of 3 or more axle sets</li> </ul>	Part 4 (HPMV limits)	<i>D1.3 General access and HPMV permit mass limits tables</i> Table 6 (HPMV limits)
HPMV	<ul style="list-style-type: none"> <li>Individual axles</li> <li>Axle sets</li> <li>Groups of axle sets</li> </ul>	Parts 3 and 4 (HPMV limits)	<i>D1.3 General access and HPMV permit mass limits tables</i> Tables 1 to 6 (HPMV limits)

### Permit versus application masses

With the exception of the first axle set on the prime mover, the individual axle mass limits on the permit will be higher than the operational mass limits applied for to provide loading flexibility.

However, the total gross mass on the permit may be less than the mass applied for if there are restricted bridges on the route (see *Reduced gross mass* in section D1.2).

The permit issuing officer will generally contact the applicant and discuss options to find the most suitable solution before issuing the permit.

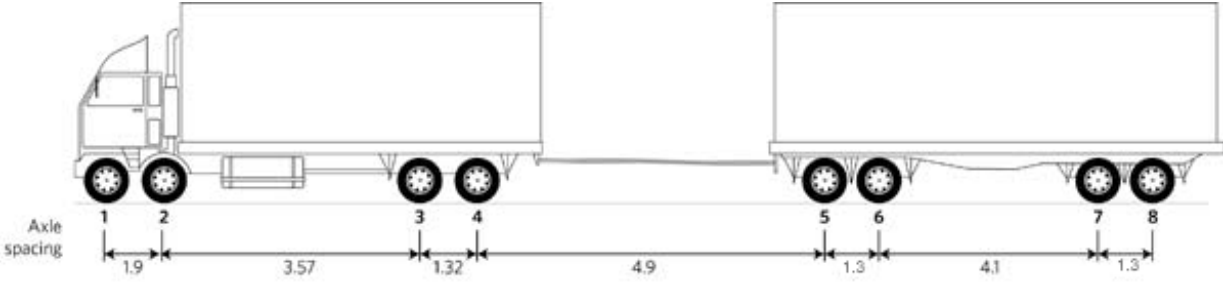
*Continued on next page*

# D3.6 Determining axle weight flexibility type, total mass and individual axle masses continued

## Examples

The examples on the following pages illustrate the difference in loading flexibility between general access AWF or HPMV AWF on an HPMV higher mass permit application.

The examples are based on an R22T22 with the following axle spacings:



*Continued on next page*



## D3.6 Determining axle weight flexibility type, total mass and individual axle masses continued

### Masses applied for

The example below shows individual axle masses on an HPMV higher mass permit application.

The individual axle masses applied for are operational weights. They must add up to the total mass applied for, which is 53,000kg in this example.

#### Mass applied for on prime mover

Steering	#	Axle*	Axle Set*	Axle Type*	Tyre Size*	Suspension Type*	Track Outer (m)*	Mass (kg)*	Spacing from prev (m)*
<input checked="" type="checkbox"/>	1	<input checked="" type="checkbox"/>	(IN) Individual	(S) Single Tyred Axle	Standarc	(L) Leaf Spring	2.04	5500.00	(m)
<input checked="" type="checkbox"/>	2	<input checked="" type="checkbox"/>	(IN) Individual	(T) Twin Tyred Axle	Standarc	(L) Leaf Spring	2.04	5500.00	1.90
<input type="checkbox"/>	3	<input type="checkbox"/>	(IN) Individual	(T) Twin Tyred Axle	Standarc	(AD) Air Bag - Drive Ax	1.86	7500.00	3.57
<input type="checkbox"/>	4	<input type="checkbox"/>	(IN) Individual	(T) Twin Tyred Axle	Standarc	(AD) Air Bag - Drive Ax	1.86	7500.00	1.32

#### Mass applied for on trailer

Steering	#	Axle*	Axle Set*	Axle Type*	Tyre Size*	Suspension Type*	Track Outer (m)*	Mass (kg)*	Spacing from prev (m)*
<input type="checkbox"/>	5	<input type="checkbox"/>	(T) Tandem	(T) Twin Tyred Axle	Standarc	(L) Leaf Spring	1.88	6750.00	5.14
<input type="checkbox"/>	6	<input type="checkbox"/>	(T) Tandem	(T) Twin Tyred Axle	Standarc	(L) Leaf Spring	1.88	6750.00	1.27
<input type="checkbox"/>	7	<input type="checkbox"/>	(T) Tandem	(T) Twin Tyred Axle	Standarc	(L) Leaf Spring	1.88	6750.00	3.60
<input type="checkbox"/>	8	<input type="checkbox"/>	(T) Tandem	(T) Twin Tyred Axle	Standarc	(L) Leaf Spring	1.88	6750.00	1.27

Continued on next page

## D3.6 Determining axle weight flexibility type, total mass and individual axle masses

continued

### Example of general access AWF permit masses

The example below shows the axle masses on the permit for the above application if the applicant has selected the general access AWF option.

The maximum permitted gross mass is 53,000kg.

**Note:** The gross mass on the permit may be less than the mass applied for if there are restricted bridges on the route.

Example of general access AWF permit mass limits								
Note: Permitted gross mass is 53,000kg								
Axle number	1	2	3	4	5	6	7	8
Axle type	S	T	T	T	T	T	T	T
Individual Axle Mass Limit (kg)	5500	5500	8200	8200	8200	8200	8200	8200
Axle Set Mass Limit (kg)	11,000		15,000		15,000		15,000	
Axle Group Mass Limit (kg)	28,000 over axles 1 - 4 (prime mover)				28,000 over axles 5 - 8 (trailer)			
Axle Group Mass Limit (kg)			29,000 over axles 3 - 6					
Axle Group Mass Limit (kg)			42,000 over axles 3 - 8 (sum of application masses and within HPMV mass limit)					
Spacing from previous axle (m)	0.00	1.90	3.57	1.32	4.90	1.30	4.10	1.30
Tyre Size	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard

General access mass limits

HPMV mass limit on group of 3 or more axle sets

\* S=Single tyred axle, T=Twin tyred axle

Continued on next page

## D3.6 Determining axle weight flexibility type, total mass and individual axle masses

continued

### Example of HPMV AWF permit masses

The example below shows the axle masses on the permit for the above application if the applicant has selected the HPMV AWF option. Note the higher individual and axle set mass limits, which provide a greater degree of loading flexibility.

The maximum permitted gross mass is 53,000kg.

**Note:** The total gross mass on the permit may be less than the mass applied for if there are restricted bridges on the route.

Example of HPMV AWF permit mass limits								
Note: Permitted gross mass is 53,000kg								
Axle number	1	2	3	4	5	6	7	8
Axle type	S	T	T	T	T	T	T	T
Individual Axle Mass Limit (kg)	5500	5500	8800	8800	8800	8800	8800	8800
Axle Set Mass Limit (kg)	11,000		16,000		16,000		16,000	
Axle Group Mass Limit (kg)	28,000 over axles 1 – 4 (prime mover)				28,000 over axles 5 – 8 (trailer)			
Axle Group Mass Limit (kg)			29,000 over axles 3 – 6					
Axle Group Mass Limit (kg)			42,000 over axles 3 – 8 (sum of application masses and within HPMV mass limit)					
Spacing from previous axle (m)	0.00	1.90	3.57	1.32	4.90	1.30	4.10	1.30
Tyre Size	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard

} Within HPMV mass limits

\* S=Single tyred axle, T=Twin tyred axle

## D3.7 Gathering required company and vehicle information

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### Applying as an unregistered user

When you apply for an HPMV higher mass permit on Waka Kotahi's Heavy Vehicle Permit Portal as an unregistered user, it is advisable to have all required information at hand because you will not be able to save your application and return to it later.

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### Applying as a registered user

If you register a user account and company and vehicle details on the permit portal, then you will only need to enter the information described in this section once during the registration process. The permit application form will then be automatically populated with relevant details when you select a registered company and vehicle unit.

For help with using the permit portal, refer to the User Guide at <https://hpmvpermits.nzta.govt.nz/home/information>.

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### Company information

You must provide the following company information:

- legally registered name of the company (or partnership)
  - company contact details, and
  - transport service licence (TSL) number.
- 

### Required vehicle details

You must provide the following vehicle details:

- vehicle registration numbers (VINs are not accepted)
  - vehicle dimensions (total width, height and length)
  - the total unit mass you wish to carry, and GCM and GVM ratings
  - axle details, including:
    - number of axles and types of axle and axle sets
    - tyre sizes
    - suspension types
    - track outer distances
    - individual axle masses (operational weights), and
    - axle spacings (see section *D3.3 How to measure axle spacings*).
-

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## D3.8 Preparing route information

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### Single or multiple routes

You may apply for a single route or for multiple routes on one application. In both cases, you must specify all roads and highways between the starting point of the journey and the final destination.

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### Postal codes

You must provide the postal codes for the starting point and the final destination of your main or most frequently travelled route on the permit application form.

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### Format of route information

An acceptable format for the route information is a list of **all** roads and highways between the starting point of the journey and your destination.

If you are applying for multiple routes, you must specify all roads and highways separately for each route.

You may wish to use directions information from Google Maps (or a similar map tool) for help in collating your route details. Alternatively, you may submit a map with the route clearly marked and the road names clearly visible.

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### Separate document

You must attach the route information as a separate document with your permit application.

Acceptable file types to attach to your application are MS Word documents, or PDF or image files.

The maximum file size of an attachment is 20MB.

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## D3.9 Completing and submitting the application form

### Online application form

You can access the application form for HPMV higher mass and overlength permits on Waka Kotahi's Heavy Vehicle Permit Portal at <https://hpmvpermits.nzta.govt.nz>.

### Checklist

Use this checklist to ensure you have all required information and documents available when you complete the application form:

- An electronic copy of detailed route information
- Electronic copies of the HPMV attributes check sheets for each vehicle unit, or a combination attributes check sheet
- The total mass and individual axle masses you wish to apply for
- If you have older attributes check sheets that do not include SRT information, electronic copies of SRT compliance certificates for each trailer on the application, and
- If you are also applying for an overlength permit, an electronic copy of a pro-forma design diagram with your vehicle's measurements.

### Trouble-shooting when completing the form

If the system does not advance to the next page when you are completing the form, then one or more fields have either missing or incomplete information.

To identify the error, scroll through the page and correct any errors until the red outlines around fields disappear.

#### Tip:

A common error is not entering numbers in the required format. You must enter numerical values to **two decimal places** and without commas, as shown in the example below:

Vehicle Type *	R22T22	
Total Height (max 4.30m) *	3.50	Two decimal places
Width to Outside Tyres (m) *	2.48	
Total Mass Applied For (kg) *	52000.00	No comma

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## D3.9 Completing and submitting the application form

### continued

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**Completeness check** To ensure your application can be processed quickly, check and confirm that you have completed all required fields marked with an asterisk (\*) and attached all required documents.

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**Declaration** By selecting the tick box in step 6 of the application form, you declare that the information you provided in the application is true and correct.

**Note:** By selecting the tick box you are making a formal declaration. False statements could be open to prosecution and subject to a penalty of up to \$10,000.

**Legislation reference:** Land Transport Act 1998 section 44.

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**Obligations of third party applicants** Third party applicants applying for a permit on behalf of a transport operator are bound by the declaration on the application form. They must ensure that they are duly authorised to make the application and that the particulars on the application are complete, true and correct to the best of their knowledge.

Third party applicants must forward all relevant information and terms and conditions to the eventual user of the permit.

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**Summary email** After submitting a permit application, you will receive an automatic email confirming that Waka Kotahi has received your application.

The email includes a reference number that allows you to track the progress of your application if you are a registered permit portal user.

The email also has:

- copies of all attachments you submitted with your permit application, and
- a PDF file with the information you provided on the application form for your records.

**Note:** If you do not receive the confirmation email, Waka Kotahi has not received your application.

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**Help** For assistance contact Waka Kotahi on 0800 699 000.

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## D3.10 Renewing an HPMV higher mass permit

### Renewal or new application?

You can renew an HPMV higher mass permit if:

- you are using the same vehicle combination specified in the original permit
- there have been no modifications to the vehicle units since the original permit was issued
- the total mass, individual axle masses and axle spacings are the same as on the original permit, and
- you will travel on the same route(s) specified on the original permit.

If any of the above details has changed, you need to lodge a new permit application.

### Renewing a permit in the permit portal

If you applied for the permit that needs to be renewed on Waka Kotahi's Heavy Vehicle Permit Portal, then the renewal process is quick and easy. You will need your previous application reference number OR your permit number (which will be the same).

**Note:** You do not need to submit HPMV attributes check sheets when you renew a permit on the portal.

Follow these steps to renew your permit:

Step	Action
1	Access the permit portal at <a href="https://hpmvpermits.nzta.govt.nz">https://hpmvpermits.nzta.govt.nz</a> and log in if you are a registered user.
2	Click on <b>Permits</b> and open a new Online HPMV Permit Application form.
3	In Step 1 – Permit Information on the application form, enter either your: <ul style="list-style-type: none"> <li>• previous application reference number, OR</li> <li>• the number of the permit you wish to renew.</li> </ul> <p><b>Result:</b> The application form will automatically be populated with the required information.</p>
4	Edit the 'Date Permit Required' field in Step 2 – General Information and then click through to Step 6 – Submit.
5	Select the tick box in Step 6 next to the declaration and click <b>Submit Application</b> . You will receive an automatic email confirming that Waka Kotahi has received your renewal application.

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## D3.10 Renewing an HPMV higher mass permit continued

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### **When you need to reapply**

If you did not apply in the permit portal for the permit you wish to renew, then the permit details are not stored in the portal database. This means that you cannot use the renewal option in the portal and need to reapply by entering all required information in the application form.

You must also attach all required documents, such as HPMV attributes check sheets and route information, to the new application.

Once your new permit has been issued from the portal, you will be able to use the portal renewal option for future renewals.

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## D3.11 Permit fee and processing time

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### Permit fees

For the standard permit fees, see section A2.5 in *Part A: Introduction to VDAM permits* in this volume of the manual.

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### Permit processing time

Waka Kotahi makes every effort to process HPMV higher mass permit applications as quickly as possible.

In general, higher mass permits are issued within 20 working days if there are no operator compliance issues, and no specialist input or complex route analysis is required.

However, some aspects of the permitting process are outside the control of Waka Kotahi and may result in a longer processing time, for example, if approvals from local road controlling authorities are required.

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