

General Mass Limits (GML)

What is GML?

General Mass Limits (GML) apply to all heavy vehicles.

GML states the mass limits for all types of heavy vehicle axle groups unless the vehicle is operating under an exception, an exemption (notice or permit), or PBS approval under the *Heavy Vehicle National Law* (HVNL).

Table 1 outlines some heavy vehicles and combinations and is not an exhaustive list.

Table 1: General Mass Limits for single vehicle or combination

Description of vehicle or combination	Mass limit (t)
<ul style="list-style-type: none"> • Complying bus without a trailer - <ul style="list-style-type: none"> ○ If the bus has only 2 axles but is not an eligible 2-axle bus 	16.0
<ul style="list-style-type: none"> ○ if the bus has a rear tandem axle group fitted with single tyres on 1 axle and dual tyres on the other axle but is not an eligible 3-axle bus 	20.0
<ul style="list-style-type: none"> ○ if the bus has a rear tandem axle group fitted with dual tyres on all axles 	22.5
<ul style="list-style-type: none"> • for a bus that is an ultra-low floor bus with no axle groups and only 2 single axles but is not an eligible 2-axle bus 	16.0
<ul style="list-style-type: none"> • for an eligible 2-axle bus 	18.0
<ul style="list-style-type: none"> • for an eligible 3-axle bus 	22.0
<ul style="list-style-type: none"> • for a complying steer axle vehicle that is neither a B-double nor a road train 	43.0
<ul style="list-style-type: none"> • for a Euro VI vehicle (complying steer axle) that is not a B-double 	43.5
<ul style="list-style-type: none"> • for a Euro VI vehicle (single steer axle) that is not a B-double 	43.0
<ul style="list-style-type: none"> • for a Euro VI vehicle (twinsteer) that is a prime mover with a twinsteer axle group towing a tri-axle semitrailer 	47.0
<ul style="list-style-type: none"> • for a prime mover with a twinsteer axle group towing a tri-axle semitrailer 	46.5
<ul style="list-style-type: none"> • for a vehicle that is not mentioned above and that is neither a B-double nor a road train 	42.5

Note: In a combination, the mass of a dog, pig or tag trailer **must not be more than the mass of the towing vehicle**. This in effect is a maximum of 1:1 tow mass ratio.

Mass limits for a vehicle with an axle space less than 2.5m

Where the axle spacing between two axles is less than 2.5m, the mass limit is 15t.

More information on common heavy vehicle combinations can be found at [Common Heavy Freight Vehicles Combination Chart](#).

Mass limits for a single axle or axle group

The mass on a single axle or axle group must not be more than the mass limit described below.

Table 2: Axle Mass Limits

Axle	Description of single axle or axle group	Mass limit (t)
	Single axles and single axle groups	
	Steer axles on -	
	<ul style="list-style-type: none"> a complying bus that is not an eligible 2- axle bus or an eligible 3-axle bus 	6.5
	<ul style="list-style-type: none"> a complying steer axle vehicle* 	6.5
	<ul style="list-style-type: none"> a hauling unit or prime mover forming part of a road train fitted with tyres with section widths of - 	
	<ul style="list-style-type: none"> o at least 295mm 	6.5
	<ul style="list-style-type: none"> o at least 375mm 	7.1
	<ul style="list-style-type: none"> an eligible 2-axle bus 	7.0
	<ul style="list-style-type: none"> an eligible 3-axle bus 	6.5
	<ul style="list-style-type: none"> Euro VI vehicle (complying steer axle)** 	7.0
	<ul style="list-style-type: none"> Euro VI vehicle (single steer axle)*** 	6.5
	<ul style="list-style-type: none"> another motor vehicle 	6.0
	Single axle or single axle group fitted with single tyres with section widths of -	
	<ul style="list-style-type: none"> less than 375mm 	6.0
<ul style="list-style-type: none"> at least 375mm but less than 450mm 	6.7	
<ul style="list-style-type: none"> at least 450mm 	7.0	
	Single axle or single axle group fitted with dual tyres on -	
	<ul style="list-style-type: none"> a pig trailer 	8.5
	<ul style="list-style-type: none"> a complying bus, or a bus authorised to carry standing passengers under an Australian road law, that is not an eligible 2-axle bus 	10.0
	<ul style="list-style-type: none"> an ultra-low floor bus with no axle groups and only two single axles that is not an eligible 2-axle bus 	11.0
	<ul style="list-style-type: none"> an eligible 2-axle bus 	12.0
	<ul style="list-style-type: none"> another vehicle 	9.0
	Tandem axle group	
	Tandem axle group fitted with single tyres with section widths of -	
	<ul style="list-style-type: none"> less than 375mm 	11.0
	<ul style="list-style-type: none"> at least 375mm but less than 450mm 	13.3
	<ul style="list-style-type: none"> at least 450mm 	14.0

Axle	Description of single axle or axle group	Mass limit (t)
	Tandem axle group fitted with single tyres on 1 axle and dual tyres on the other axle on -	
	<ul style="list-style-type: none"> a complying bus that is not an eligible 3-axle bus 	14.0
	<ul style="list-style-type: none"> an eligible 3-axle bus with tyres on the axle fitted with single tyres that have a section width of at least 295mm 	15.5
<ul style="list-style-type: none"> another motor vehicle 	13.0	
	Tandem axle group fitted with dual tyres on -	
	<ul style="list-style-type: none"> a pig trailer 	15.0
<ul style="list-style-type: none"> another vehicle 	16.5	
Twinsteer axle groups		
	<ul style="list-style-type: none"> Twinsteer axle group without a load-sharing suspension system 	10.0
	<ul style="list-style-type: none"> Twinsteer axle group with a load-sharing suspension system 	11.0
	<ul style="list-style-type: none"> Euro VI vehicle (twinsteer)**** 	11.5
Tri-axle groups		
	Tri-axle group on a vehicle fitted with -	
	<ul style="list-style-type: none"> single tyres with section widths of less than 375mm on all axles single tyres with section widths of less than 375mm on some axles and dual tyres on the other axles 	15.0
Tri-axle group on a pig trailer fitted with -		
<ul style="list-style-type: none"> single tyres with section widths of at least 375mm on all axles 	18.0	
<ul style="list-style-type: none"> dual tyres on all axles single tyres with section widths of at least 375mm on some axles and dual tyres on the other axles 		
Tri-axle group on a vehicle other than a pig trailer fitted with -		
	<ul style="list-style-type: none"> single tyres with section widths of at least 375mm on all axles 	20.0
	<ul style="list-style-type: none"> dual tyres on all axles single tyres with section widths of at least 375mm on some axles and dual tyres on the other axles 	
Quad axle groups		
<ul style="list-style-type: none"> Quad-axle group fitted with single tyres with section widths of less than 375mm 	15.0	
<ul style="list-style-type: none"> Quad-axle group fitted with single tyres with section widths of at least 375mm or dual tyres 	20.0	
Axle groups of 5 or more		
<ul style="list-style-type: none"> Rear group of 5 or more axles on a low loader fitted with single tyres with section widths of less than 375mm 	15.0	
<ul style="list-style-type: none"> Any other rear group of 5 or more axles on a low loader 	20.0	

Table Definitions:

***A complying steer axle vehicle** is a heavy motor vehicle with a GVM over 15t that is fitted with specified technologies, including:

- an engine complying with the requirements about emission control contained in ADR 80/01 or a later version of ADR 80
- a front underrun protection device that complies with UN ECE Regulation No. 93 or ADR 84
- a cabin that complies with UN ECE Regulation No. 29
- appropriately rated tyres, axle and suspension to permit 6.5t on the steer axle.

A complying steer axle vehicle is permitted a maximum steer axle mass of up to 6.5t, provided it does not exceed the manufacturers rating. The allowable GVM/GCM may also be increased by up to 0.5t for vehicles meeting the above conditions.

Note: The additional 0.5t applies to the allowable GVM/GCM only and does not increase the 6.5t steer axle mass limit.

****A Euro VI vehicle (complying steer axle)** is a heavy motor vehicle with a single steer axle that:

- has an engine complying with the requirements about emission control contained in ADR 80/04 or a later version of ADR 80
- has a front underrun protection device that complies with UN ECE Regulation No. 93 or ADR 84
- has a cabin that complies with UN ECE Regulation No. 29
- has appropriately rated tyres, axle and suspension to permit 7.0t on the steer axle
- is fitted with tyres with section widths of at least 315mm
- has a GVM of 15t or more.

This definition does not include:

- buses
- heavy motor vehicles forming part of a road train.

*****A Euro VI vehicle (single steer axle)** is a heavy motor vehicle with a single steer axle, other than a complying steer axle vehicle, that:

- has an engine complying with the requirements about emission control contained in ADR 80/04 or a later version of ADR 80
- has appropriately rated tyres, axle and suspension to permit 6.5t on the steer axle.

This definition does not include:

- buses
- heavy motor vehicles forming part of a road train.

******A Euro VI vehicle (twinsteer)** is a heavy motor vehicle with a twinsteer axle group that:

- has an engine complying with the requirements about emission control contained in ADR 80/04 or a later version of ADR 80
- has a load-sharing suspension system for the axle group
- has appropriately rated tyres, axles and suspension to permit 11.5t on the axle group
- is fitted with tyres with section widths of at least 275mm.

This definition does not include:

- buses
- heavy motor vehicles forming part of a road train.

Note: For more information on Euro VI vehicles, please see [ADR 80/04 \(Euro VI\) emissions mass limits increase - Information sheet \(PDF, 269KB\)](#).

For more information:

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