

Mass and Dimension Confirmation Guideline

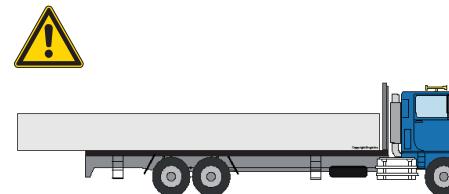
This guideline:

- Provides general information on legal mass and dimensions limits for general access Heavy Vehicles (GVM/GCM greater than 4.5 tonne) on public roads.
- ⚠ Legislation changes from time to time, so users are advised to check current start requirements and oversize load.
- Mass Limits per Heavy Vehicle National Law and the WA Road Traffic (Vehicles) Regulations 2014.
- ℹ For further information please refer to the Heavy Vehicle National Law (HVNL) regulated by the National Heavy Vehicle regulator (NHVR) or the WA Road Traffic (Vehicles) Regulations 2014.
- Covers general Oversize vehicle requirements for various Australian jurisdictions. Only daytime transport is covered. Additional requirements and/or restrictions apply for night travel.
- Provides general information on legal dimensions limits for general access Heavy Vehicles (GVM/GCM greater than 4.5 tonne) on public roads. Legislation changes from time to time, so users are advised to check current start requirements and oversize load.
- ⚠ Will cover loads no greater than 26 tonnes. Loads greater than 26 tonnes will require pilots and escorts, for reference consult NHVR website.

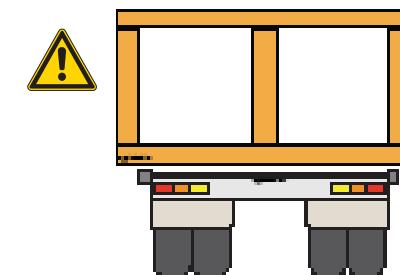
Key evaluation outcomes:



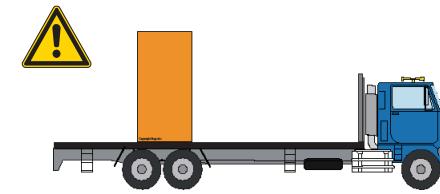
Vehicle overmass --> page 2-3



Vehicle overlength --> page 3



Vehicle overwidth --> page 4



Vehicle overheight --> page 3

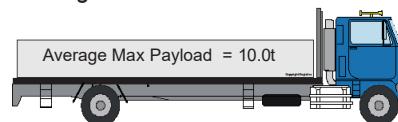
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General Mass, Axle Limits & Load Configurations:

- ✓ The following provides Axle and Gross Vehicle Mass or Gross Trailer Mass limits specific to each vehicle type per the NHVR specifications and Part 8 of the WA Road Traffic (Vehicles) Regulations 2014.
- ✓ Axle spacing should be compliant to that required for the state of jurisdiction.
- ✓ Loaders should consult drivers for load placement to ensure axles loads remain compliant.
- ⚠ If specified limits are exceeded the vehicle or trailer is considered overmass, and fines or mechanical failure can occur.
- Hydro Tasmania Steer axle mass must never be greater than 6.5 tonnes (can be up to 6.7t if prime mover is part of a road train fitted with tires of at least 375mm).
- ⚠ Gross Vehicle Mass (GVM) is a combination of vehicle self weight (TARE) and the load mass on the deck.

Rrigids: (Service Vehicles apply)

Single Axle: GVM = 15.5t



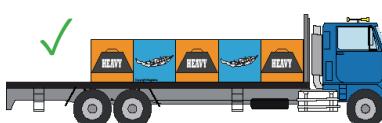
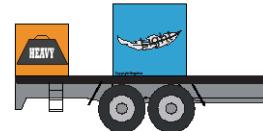
- ✓ Ensure even weight distribution where possible
- ✓ Centre heaviest item over rear axles where possible

Dual Axle: GVM = 23t



- ✓ Ensure even weight distribution where possible
- ✓ Centre heaviest item over rear axles where possible

Excess weight behind axles can cause overload



Even weight distribution



Heaviest item centred

Axles Requirements:



6.5t
Steer axle



16.5t
Dual axle



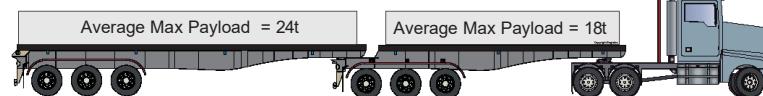
20.0t
Tri-axle

Semi's & B-Doubles:

6 Axle Semi: GCM = 42.5t



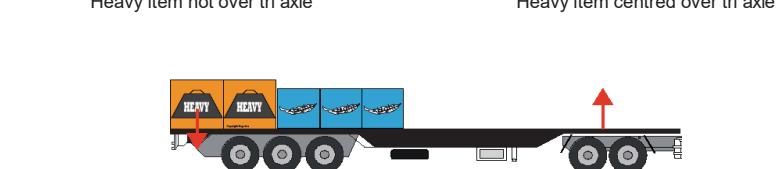
9 Axle B-Double: GCM = 62.5t



- ✓ Ensure even weight distribution where possible
- ✓ Centre heaviest item over Tri-axles where possible



⚠ Large Items are not always the heaviest

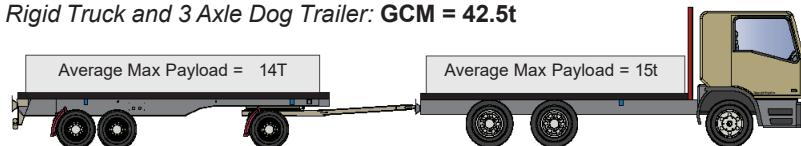


⚠ Placing heavy items too close to the rear can cause lift forces on the B coupling and uneven loading of the tri axle

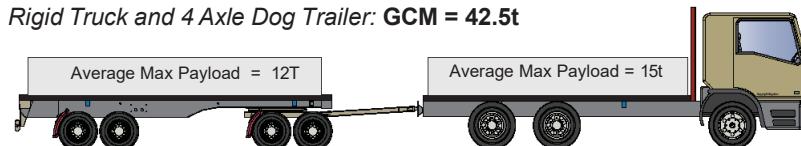
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Truck & Dog's:

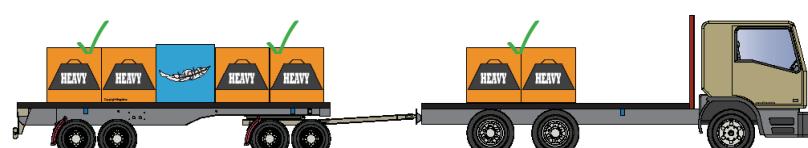
Rigid Truck and 3 Axle Dog Trailer: GCM = 42.5t



Rigid Truck and 4 Axle Dog Trailer: GCM = 42.5t



- ✓ Ensure even weight distribution where possible
- ✓ Centre heaviest items over axle or dolly

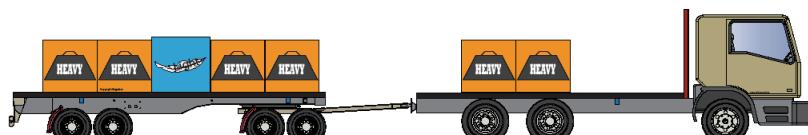


Heavy item centred over axles



Check GCM when combination is more than 1 component (i.e. truck and trailer) and ensure the combination does not exceed GVM limits.

Trailer + Truck = Equal or Less than GVM

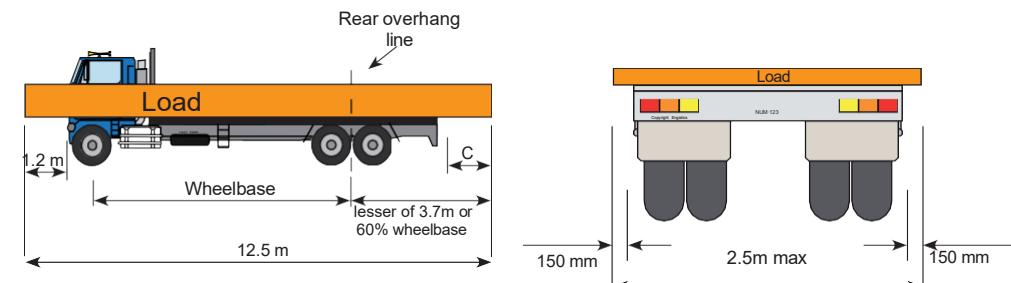


Legal vehicle dimension limits

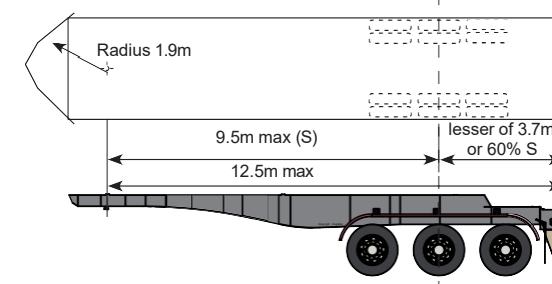
- ✓ Table 1 provides limits for all states and territories. Some areas may have exemptions for special length semi-trailers.

Table 1: Maximum standard dimension limits

	Maximum standard dimension limits (including load)			
	Width (m)	Length (m)	Height (m)	Rear overhang (m)
Rigid truck	2.5	12.5	4.3	Lesser of 3.7 or 60% of wheelbase
Rigid truck & pig trailer	2.5	19.0	4.3	Lesser of 3.7 or front loading space
Rigid truck & dog trailer	2.5	19.0	4.3	Lesser of 3.7 or 60% of wheelbase
Articulated vehicle	2.5	19.0	4.3	Lesser of 3.7 or 60% of "S" dimension



- ✓ For "C" greater than 1.2 m, or not easily visible, a bright coloured flag is required. (Must be red, red and yellow or yellow in all states and territories besides WA and NT). WA requires a bright coloured flag.



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2.1 Oversize Width Requirements

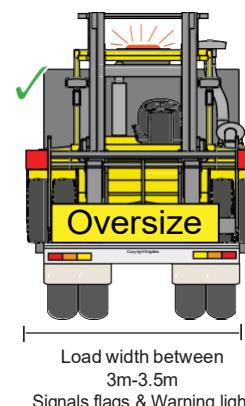
All states and territories

- ✗ Displaying warning devices when not required may result in a fine.

Table 2: Width requirements for warning devices in daytime travel

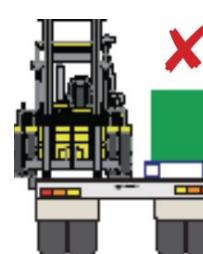
	2.5-3m	3-3.5m
Low beam headlights on	✓	✓
Warning light operating	✗	✓
Warning sign	✓ (front & rear)	✓ (front & rear)
Flags	✓	✓

- ✓ Oversize sign to be attached front and rear if load width exceeds 2.5m.
- ✓ Oversize sign to be minimum 1200mm x 450mm.



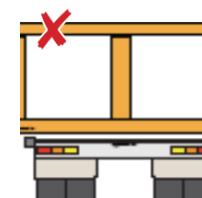
Multiple indivisible loads

Forklift and pallet loaded side by side exceed trailers width dimensions. By placing lengthwise, avoids this scenario.



Excess Dimension Width

Transport frames placed sideways on trailer, causing pipe to "stick out", exceeding width dimensions.



- ✓ Delineators and warning light on loads overhanging side by more than 150 mm and less than 500 mm thick.

