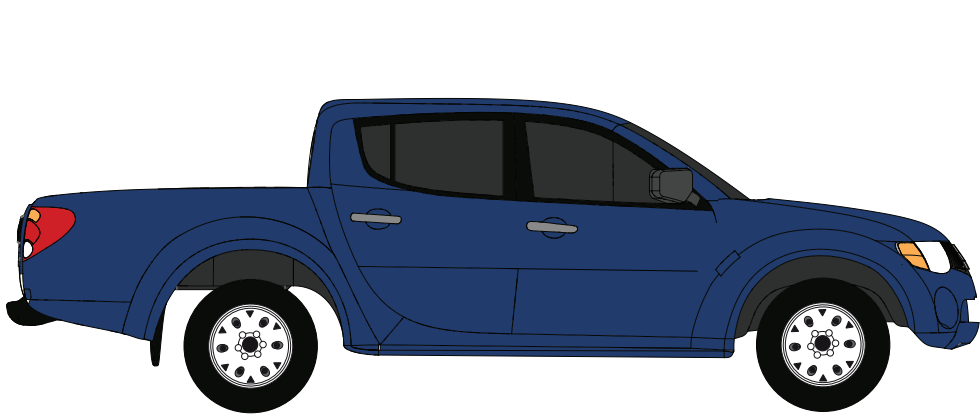
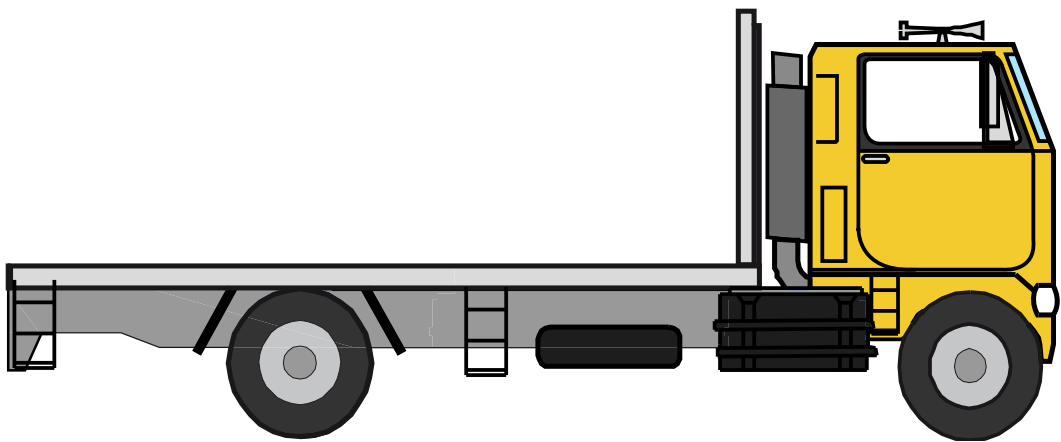


**This Poster Applies To:**

Light vehicles used for personal and commercial purposes that are collecting or delivering product to this



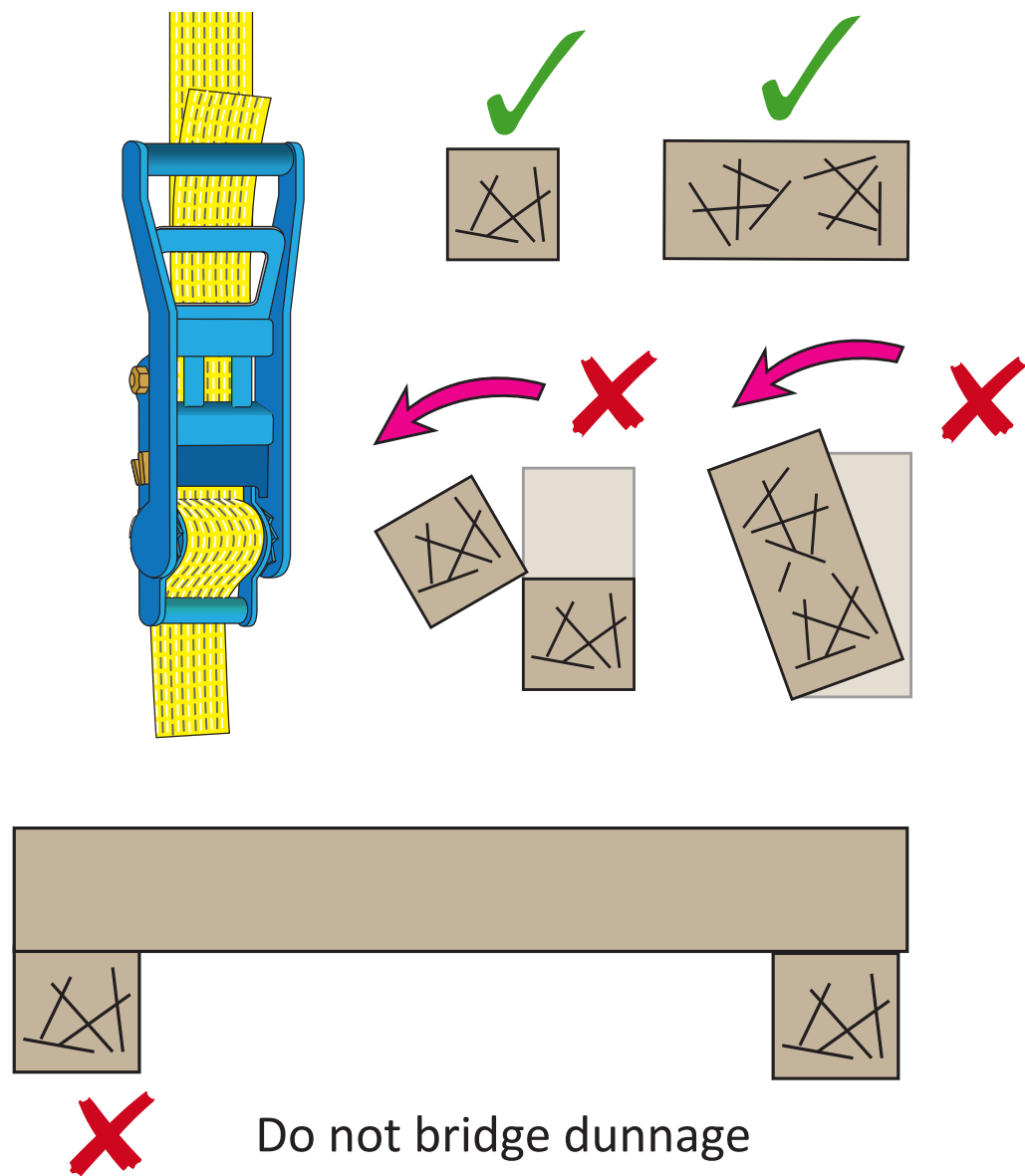
Light Vehicle



Light Truck

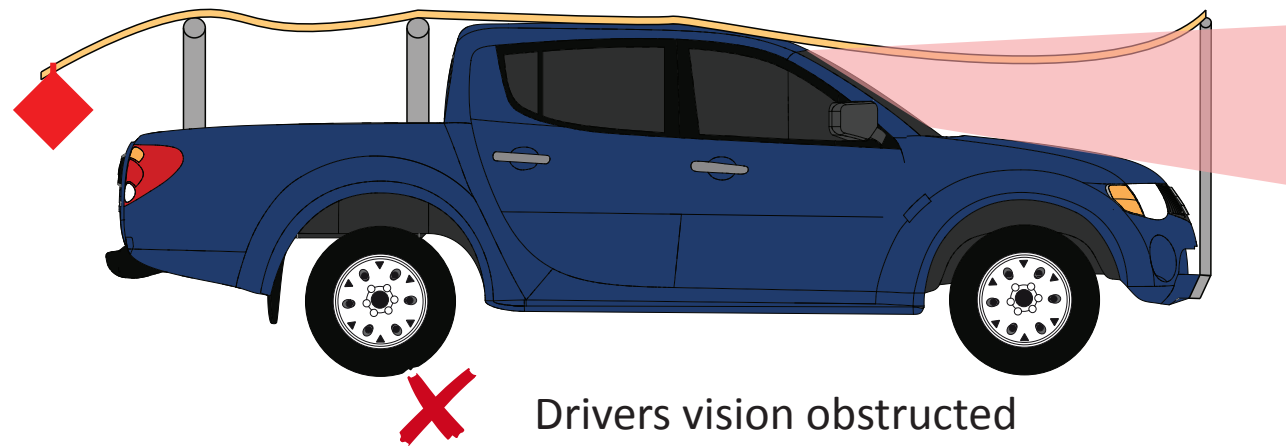
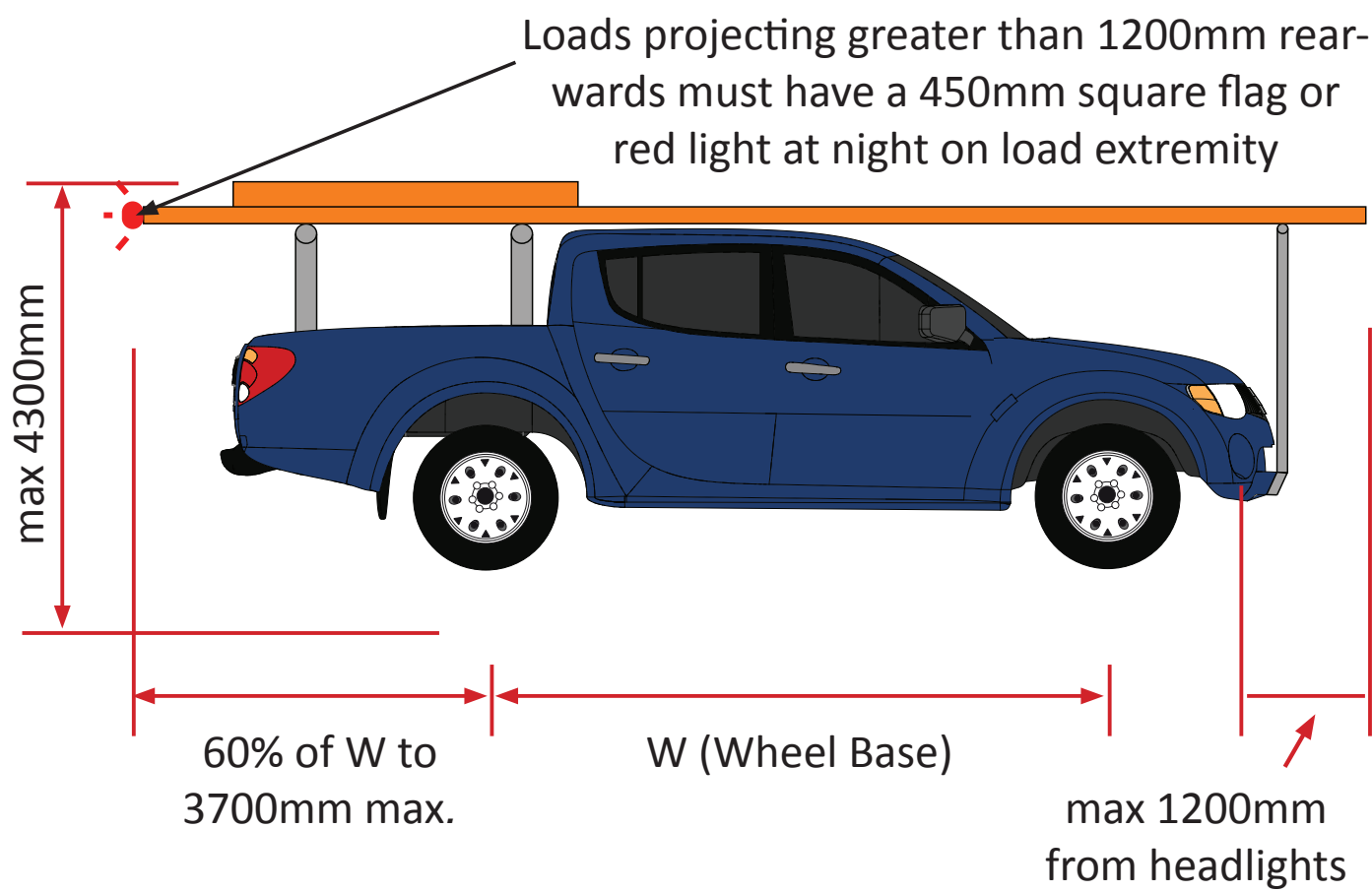
**Load Restraint Equipment:**

- ✓ 50mm webbing straps, 300 kgf pretension, 35mm webbing straps, 250 kgf pretension, 25mm webbing straps, 100 kgf pretension, all conforming to AS/NZ 4380.
- ✓ Anti-slip rubber or equivalent with minimum static friction coefficient of 0.6 when required.
- ✓ Rough sawn plywood.
- ✓ Use square timber dunnage in good condition.
- ⚠ Rectangular dunnage must be placed on long edge.
- ✗ Don't stack or bridge dunnage or use rectangular dunnage on short edge.
- ✓ Freight must be strapped, banded, caged or crated to meet the Performance Standards.

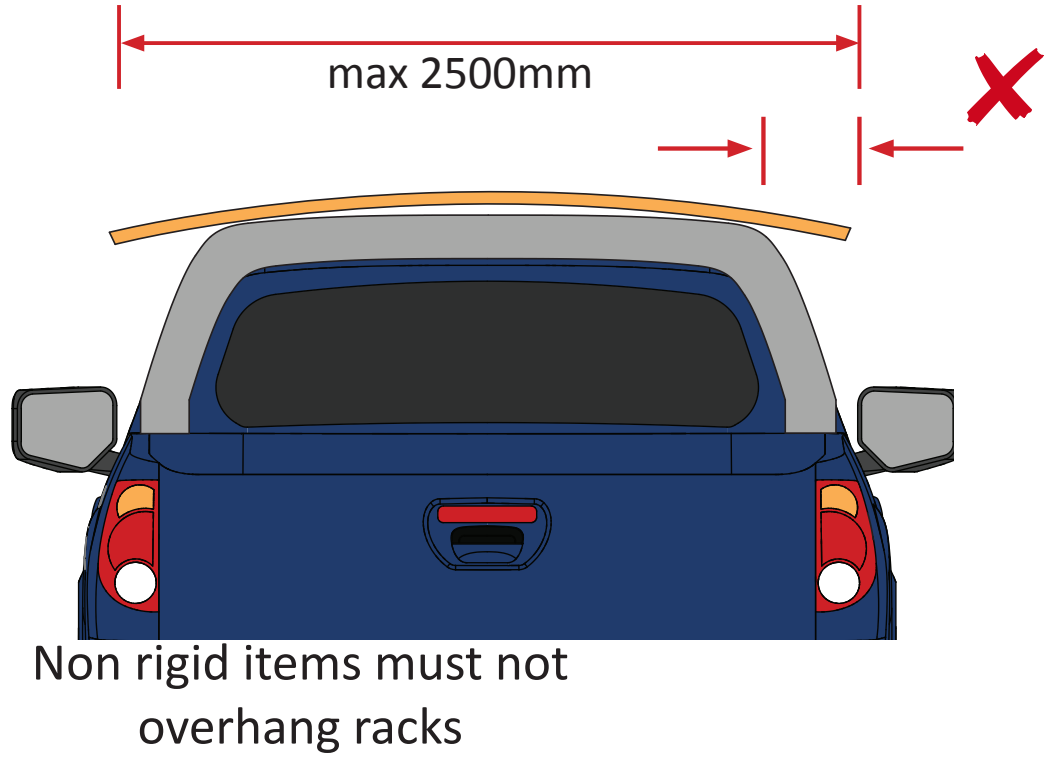
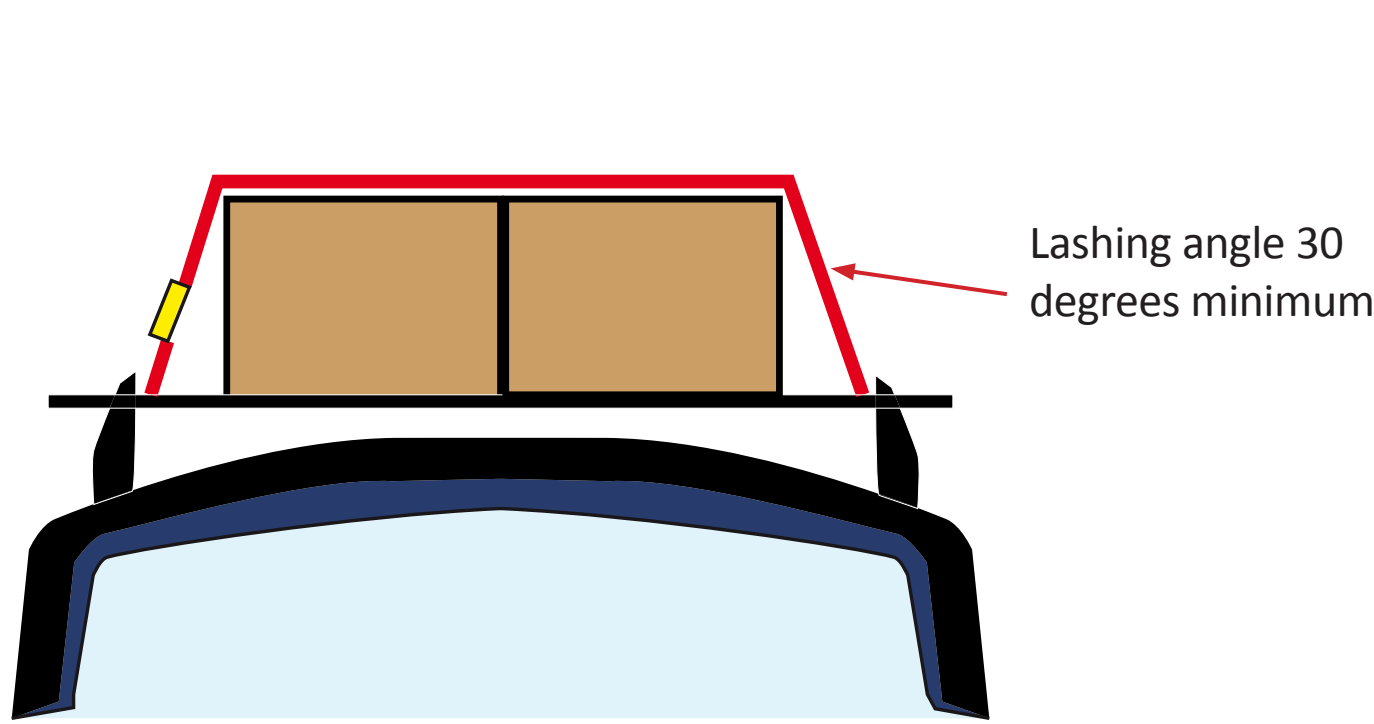


Do not bridge dunnage

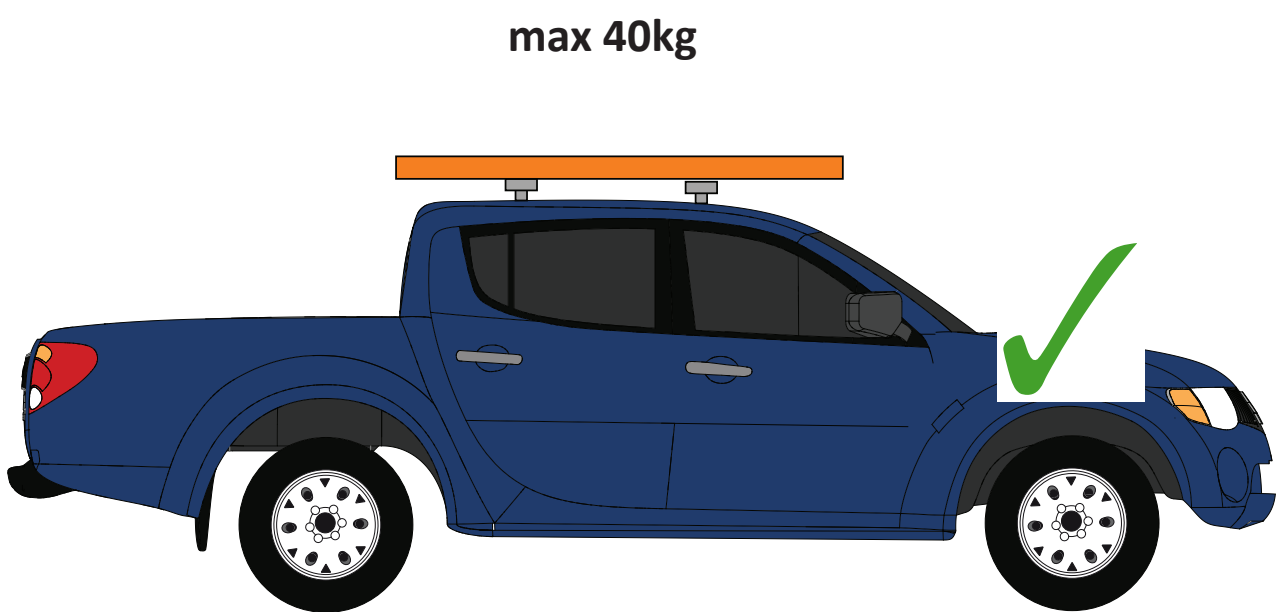
**Roof Rack Loading:**



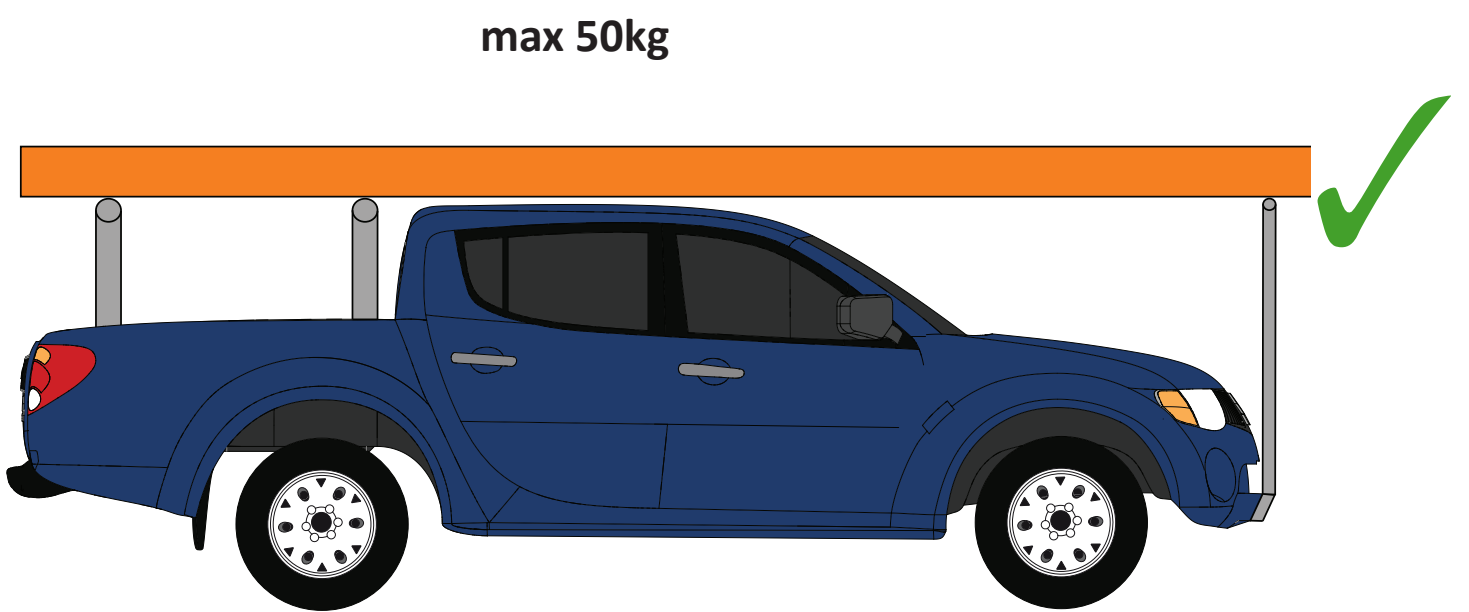
**Roof Rack Loading (cont.):**



- ✓ Load up to rack and vehicle manufacturer limits where available and sighted.
- ✓ Maximum mass for racks includes the product payload, any supporting items and restraint equipment.



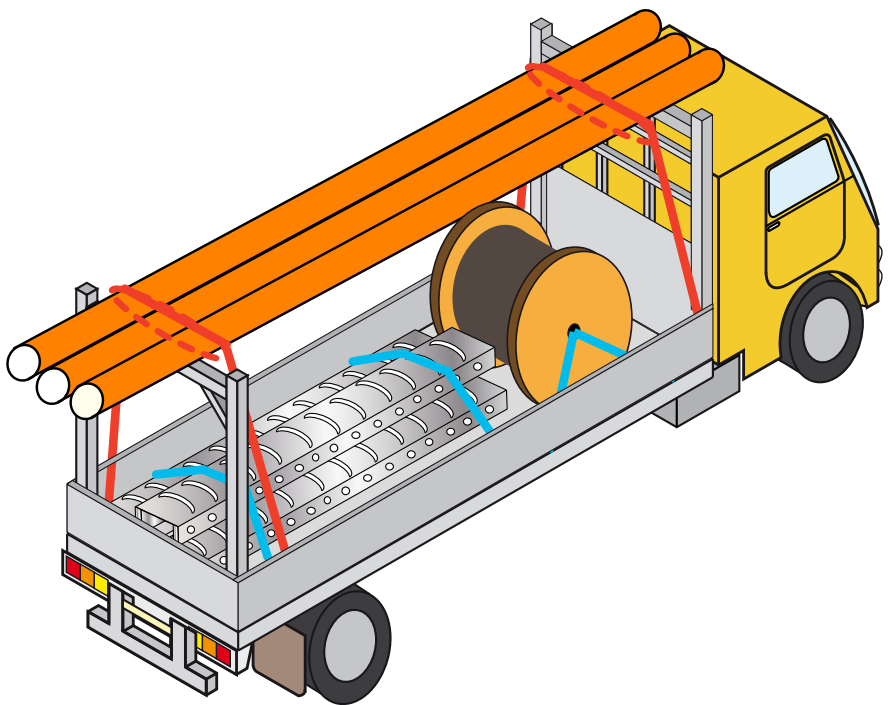
Maximum load for unrated 2 rack light vehicle system



Maximum load for unrated 3 rack light vehicle system

Upright Member Size	Weight Guidance Limit (total)	
	Horizontal Load	Inclined Load (max 30% slope)
35 x 35 x 3.0 SHS	150 kg	100 kg
40 x 40 x 3.0 SHS	220 kg	150 kg
50 x 50 x 3.0 SHS	380 kg	250 kg

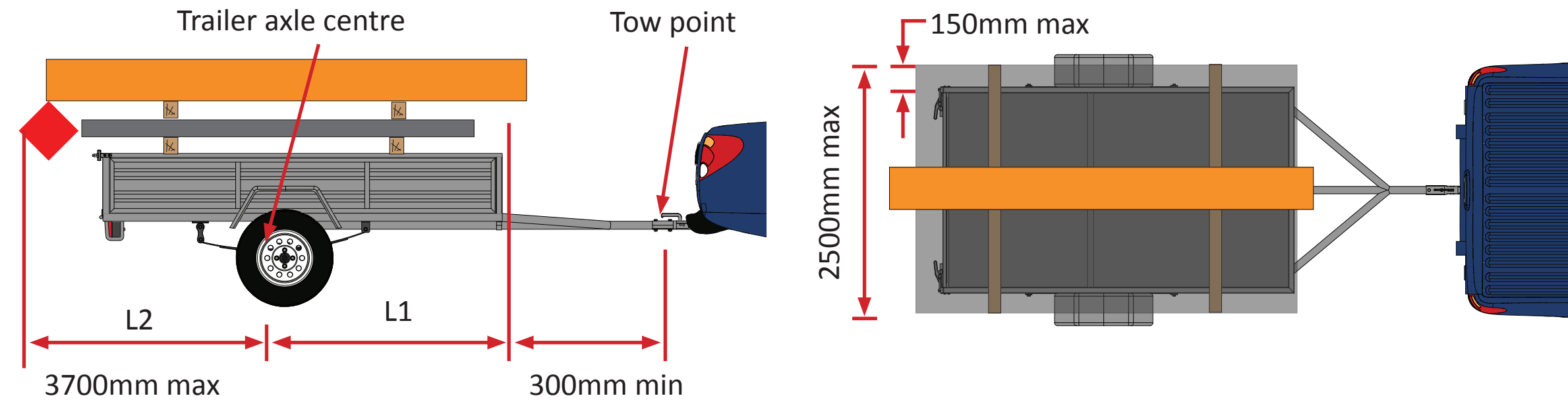
SHS standards for Square Hollow Section



Maximum load for unrated 2 rack light truck system

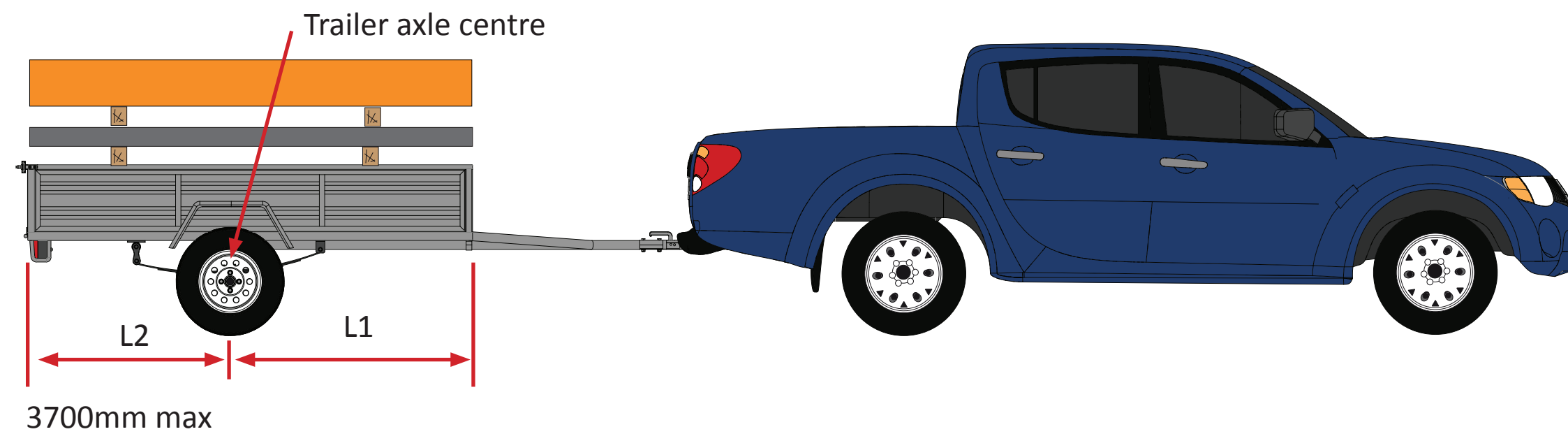


## Trailer dimension limits - QLD / WA / SA:



- ✓ L2 must be less than or equal to L1.
- ✓ Front overhang must maintain a minimum 300mm clearance to tow ball.

## Trailer dimension limits - VIC / NT / NSW / ACT / TAS:

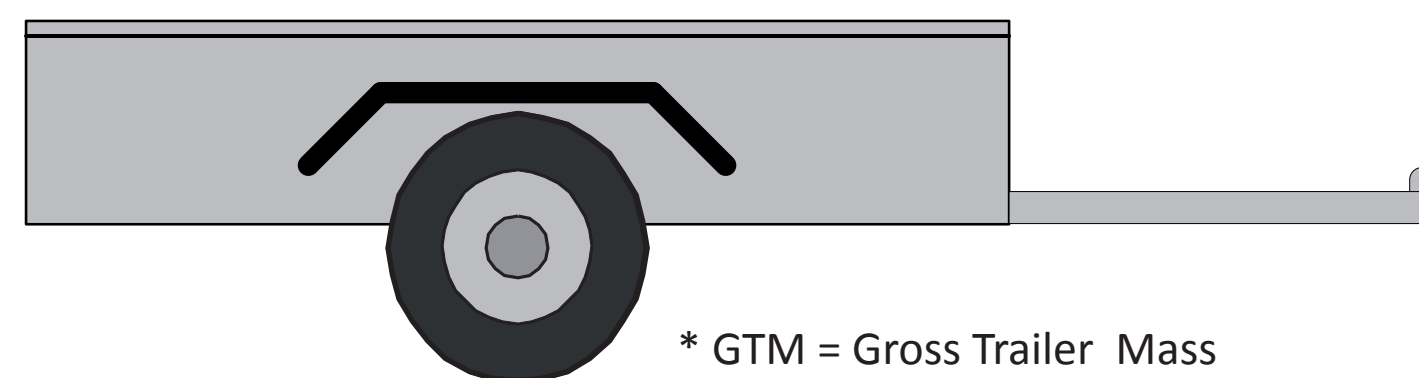


- ✓ L2 must be less than or equal to L1 where L1 is the distance from the axle centre to the front of the load carrying area (front of box for box trailer).

## Mass Limits

### Very Light Box Trailer

GTM\* = 0.75t

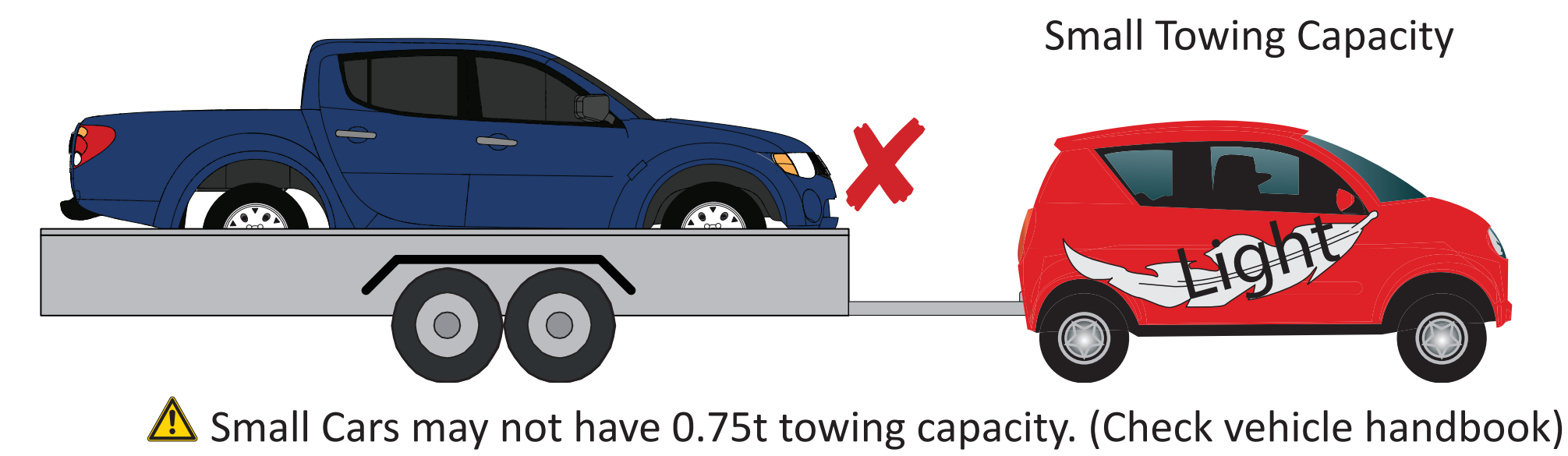
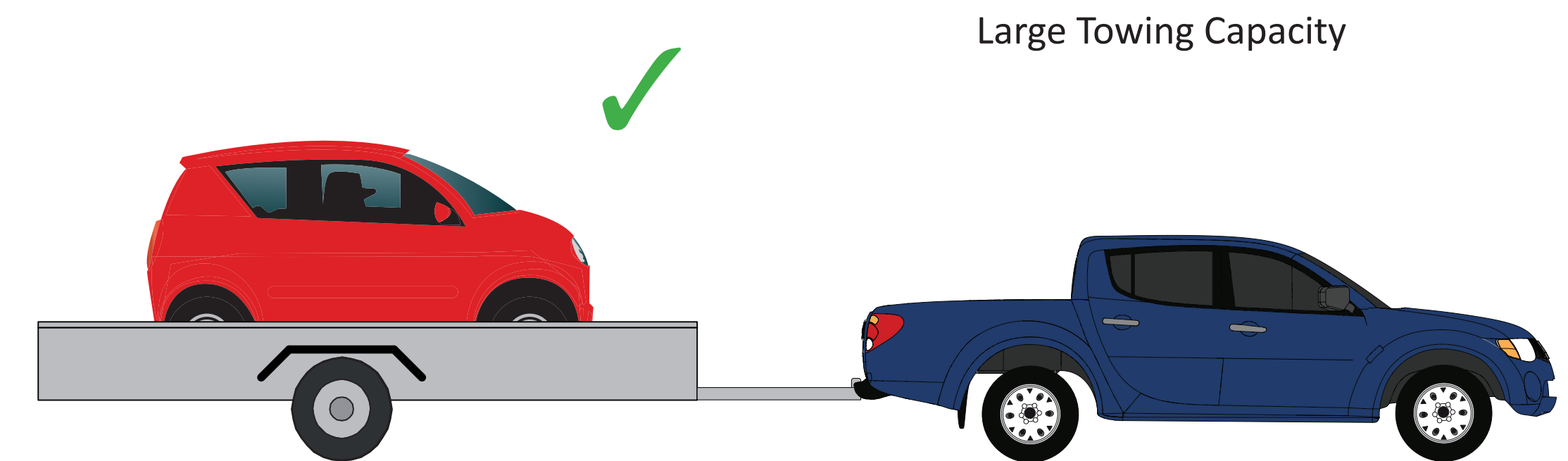


\* GTM = Gross Trailer Mass

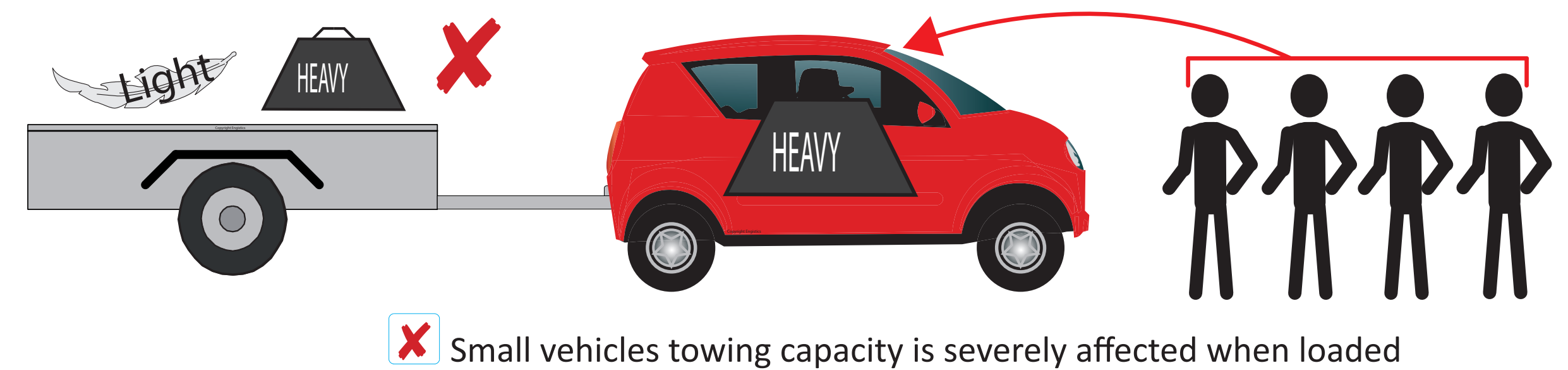
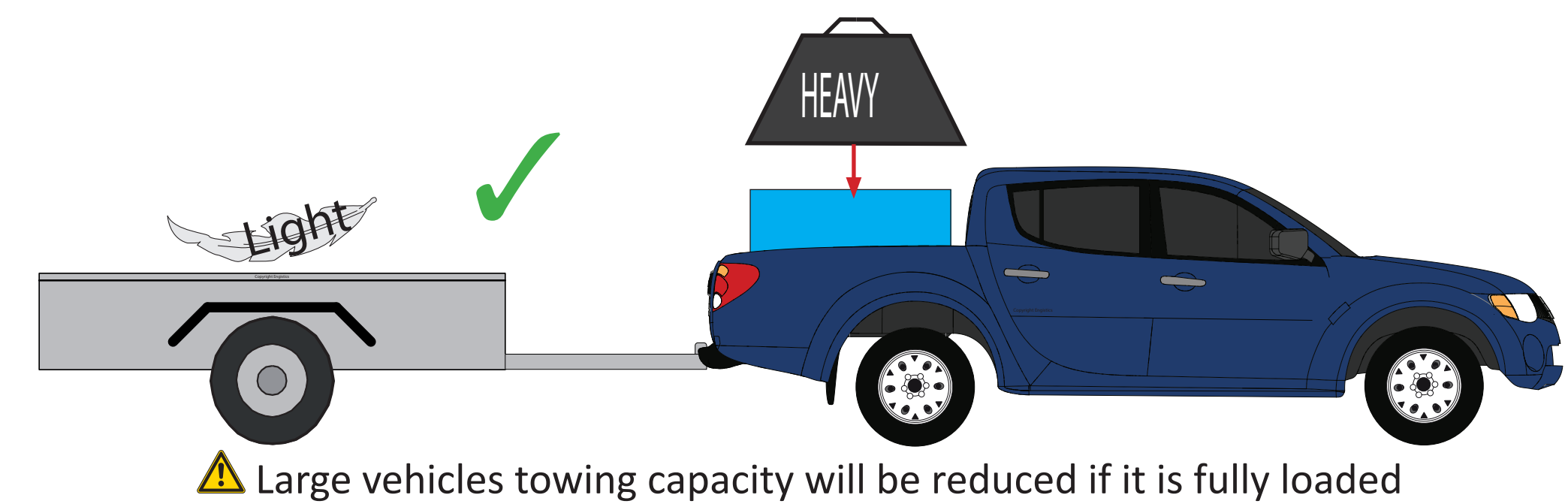
- ✓ Trailer mass must take into consideration the capacity of the towing vehicle
- ✓ Maximum GTM can be less than 0.75t if specified by the manufacturer (eg trailer capacity)
- ✓ Vehicle and Trailer to be in roadworthy and safe condition
- ✓ Light Trailers with GTM over 750kg and up to 3500kg require current safety certificate

# Light Vehicle Load Restraint

## Towing Capacity Effects

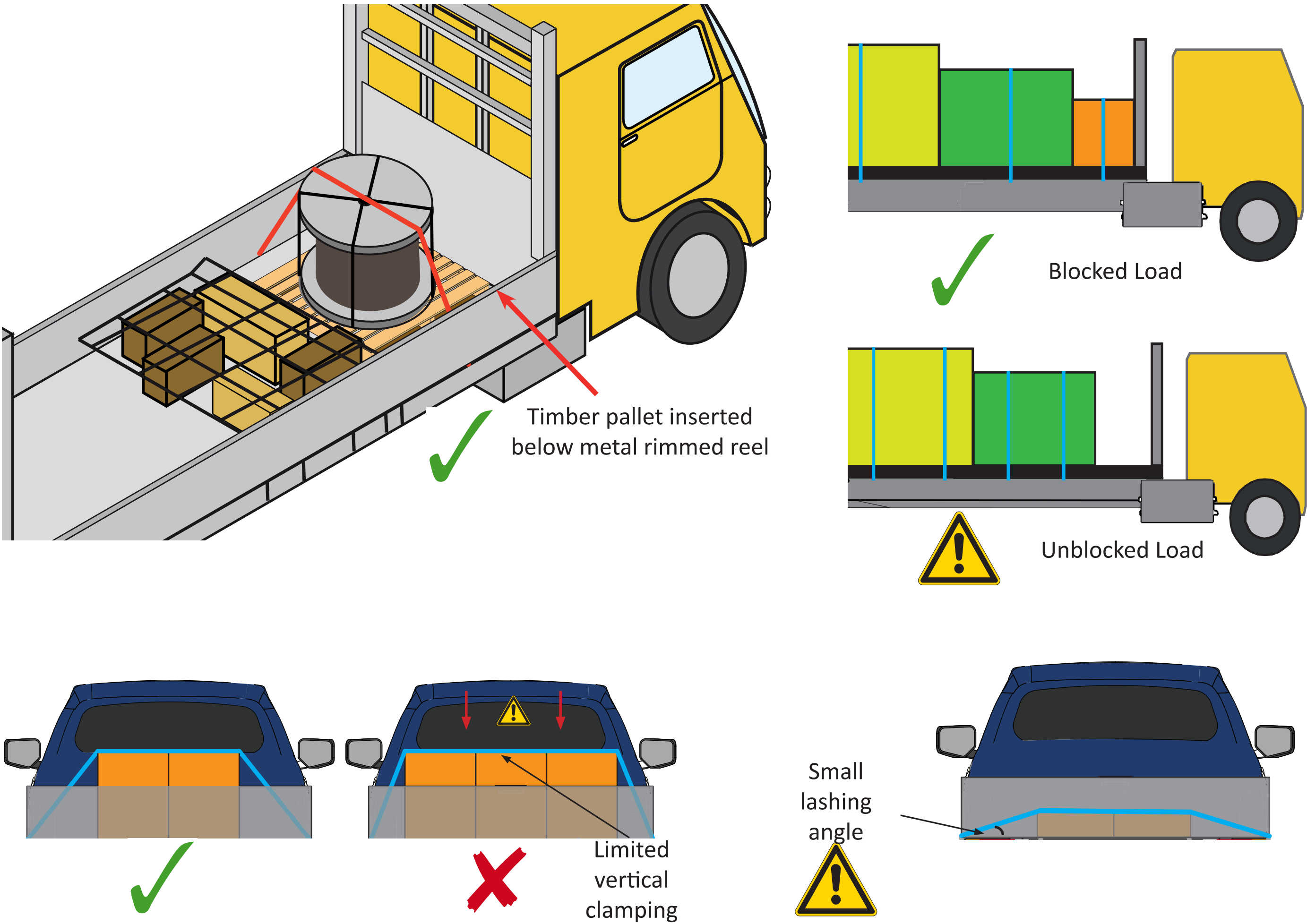


## Vehicle Loading

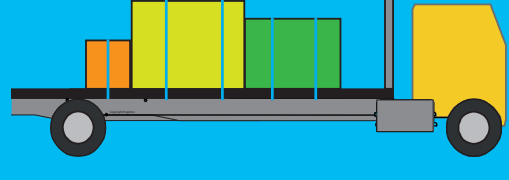



Tie-Down Restraint:

- ✔ Use 50mm webbing straps or greater where possible.
- ✔ Minimum of 2 straps on loads more than 1200mm long.
- ✘ No low friction (metal on metal, plastic on plastic, plastic on metal) between the load and deck.
- ✔ Insert timber or rubber between the metal of the deck, and metal or plastic products.
- ✔ Block to the headboard where practical, to:
  - Reduce the required number of lashings
  - Steady tall objects
  - Reduce the risk of spearing from bundles
- ✔ Do not load more than two abreast when using tie-down lashings.
- ✔ Tie-down lashings must be applied at angles greater than 30 degrees.
- ✔ If the lashing angle is lower:
  - Contain and block in all directions, or;
  - Choke or belly-wrap the load and position the load to be blocked forward



Maximum Restrained Mass Per Lashing - Timber Dunnage

	Lashing Angle to horizontal	Preferred		25mm or over webbing strap and ratchet
		50mm or over webbing strap and ratchet	35mm or over webbing strap and ratchet	
		300 kg	250 kg	
		420 kg	350 kg	
	30 - 45 degrees			100 kg
	45 - 60 degrees			140 kg
	60 - 90 degrees			170 kg

	Lashing Angle to horizontal	Preferred		25mm or over webbing strap and ratchet
		50mm or over webbing strap and ratchet	35mm or over webbing strap and ratchet	
		1200 kg	1000 kg	
		1690 kg	1410 kg	
	30 - 45 degrees			400 kg
	45 - 60 degrees			560 kg
	60 - 90 degrees			690 kg

Maximum Restrained Mass Per Lashing - Roof Racks

	Lashing Angle to horizontal	Preferred		25mm or over webbing strap and ratchet	25mm or over webbing strap hand tightened
		50mm or over webbing strap and ratchet	35mm or over webbing strap and ratchet		
		75 kg	60 kg	25 kg	10 kg
		105 kg	85 kg	35 kg	15 kg
	30 - 45 degrees				
	45 - 60 degrees				
	60 - 90 degrees			40 kg	20 kg