



# Vehicle selection guidance for the parcel carrying industry

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## 1. Introduction

The PCSA recognises companies operating in our industry utilise a variety of vehicle types within their fleet based on operational need, e.g. long haul, bulk collection, collection and delivery or courier operations.

This guidance document provides an overview of the issues encountered by PCSA members in relation to each type of vehicle.

## 2. Boxed Semi-Trailers

These trailers are in the main, designed for rear loading although some have a facility for side access. They are constructed with rigid side panels and may incorporate single or double decks.



Boxed trailers can be loaded in a variety of ways (see *PCSA Loading Options Guidance Document*) but generally they are loaded from either ground level or a loading dock. They offer substantial load capacity which is well suited to long haul operations and can be loose loaded or loaded with pallets and/or containers allowing the operator to optimise loading.

When considering the purchase or hire of such a trailer organisations should consider the availability of safety features such as:

- internal lighting
- load restraint tracks
- lashing rings/anchor points
- stowable access steps and
- anti-slip features.

## Boxed Semi-Trailers continued

They should also consider the environment where the trailer is likely to be used as this will determine the most appropriate type of trailer door i.e. roller shutter or hinged “barn door”. Each door type presents different hazards during operation.

Businesses primarily loading and unloading from raised loading docks may wish to consider roller shutter doors as these can be easily opened and closed from the loading dock. Where a loading dock is not available, the person closing the shutter is at risk of falling from height. Many trailers are provided with a stowable means of access to address this issue but those using them should be provided with clear information, instructions and training in their use.



Where loading and unloading takes place from ground level, hinged “barn doors” should be considered as the doors can be fully opened from ground level with relative ease. It is important that once open they are secured using fixed retainers on the side of the vehicle.

As with the above, these trailers should be provided with a safe method of access/egress such as stowable access steps and hand holds.

Where these vehicles are to be loaded/unloaded from a raised loading dock, the driver will be required to open and secure the trailer doors before reversing onto the loading dock. During this operation the driver is at risk of being struck by moving vehicles and should wear the appropriate PPE. The driver and other relevant personnel should be trained to take account of weather conditions as opening/closing ‘barn doors’ during strong winds can result in injury.

Irrespective of the type of door there is always a risk of the load shifting whilst in transit if it has not been properly secured. Where load shift occurs those opening the roller shutter/‘barn doors’ are at risk of being struck by falling objects as the shutter/doors are opened. There should be clear instructions on what people should do in the event they believe the load has shifted, including if necessary, seeking assistance.

### 3. Curtain-sided Semi-Trailers

Curtain-sided trailers provide additional flexibility as they can also be loaded from the rear or the side. As such they can accommodate large, long or bulky items that cannot be easily loaded on a box trailer. There are however, some specific safety issues which operators need to consider.

Unless specifically designed, the curtain should never be used to restrain the load – it is purely for weather protection. If load shift (i.e. movement) occurs during transit there is a risk that the curtain will fail whilst the vehicle is in transit or the load itself will fall from the trailer when the curtain is opened. Drivers should be instructed on what to do in the event they believe the load has shifted whilst in transit. Loads must be secured at all times whilst in transit.

Opening the curtains can also be a hazardous activity, particularly in inclement weather conditions. Loose curtains can be caught by the wind and have the potential to cause serious injury. Drivers/Loaders should be trained in safe systems for opening and closing vehicle/trailer curtains to prevent injury.

A further consideration for curtain sided trailers is access to the load space. Unlike rigid trailers/vehicles, once the curtain is open, the load bay can be accessed from multiple points.



Wherever possible, persons should not access the rear of the trailer but where they do, operators should ensure that suitable equipment and instruction is provided.

## 4. Double Deck Trailers

Double deck trailers may be rigid or curtain-sided and are designed to provide operators with additional load space within the same footprint of a standard semi-trailer.

A variety of double deck trailers are available with either fixed or moving deck systems which can be lowered for loading and hydraulically raised once the loading of the deck has been completed thus allowing safe access to the lower deck.



Load planning and distribution is crucial in relation to double deck trailers to maintain an appropriate centre of gravity and ensure that the trailer remains stable while in motion. Lighter loads should always be placed on the upper deck and loads on both decks should always be secured. Drivers will require additional training to ensure they are able to control these vehicles.



Before selecting double deck trailers operators should consider the routes their vehicles will use as double deck trailers are subject to height restrictions. Operators should also consider the impact of weather conditions on double deck trailers, particularly strong winds.



## 5. Drawbar Combination (Wagon & Drag, Swap Body)



Vehicles of this nature are beneficial for organisations who service multiple locations. Using one vehicle as the drag trailer or drop/swop body, left at one location, whilst the prime mover carries on to the other location. Because they have different handling characteristics to rigid vehicles and tractor/trailer combinations operators should ensure their drivers are familiar with such vehicles and if not provide additional training.

Operators should consider the requirement for additional training on loading and unloading operations as these may vary substantially from loading standard trailers. Operators should also consider access to the various load compartments in both the coupled and uncoupled positions, particularly where there is a drawbridge between the prime mover and the drag trailer.



Operators should only consider the use of drop bodies if ground surfaces are firm and level, to ensure they remain stable.

## 6. Rigid Vehicles $\geq$ 7.5 tonnes GVW

Rigid vehicles offer a variety of advantages for operators including the ability to carry a substantial payload and the flexibility to carry a wide variety of loads from small parcels to pallets. However, operators should carefully consider the implications of choosing a larger vehicle for collection and delivery operations.



Multi-drop operations may result in vehicles running partly empty for much of their operational life. Not only can this be inefficient, it can also introduce hazards to the driver as they have to redistribute or 'trim' the load at each collection or delivery stop to ensure load and vehicle stability and prevent items being damaged.

Larger vehicles are less manoeuvrable, with restricted visibility and as such operators should consider their operational environments (particularly urban and residential) and assess the risk to their personnel, customers and, in particular, members of the public.

Operators should ensure the provision of a method for safe access/egress such as stowable access steps and handrails, whose use should be enforced.

## 7. Rigid Vehicles $\leq$ 3.5 tonnes GVW

Multi-drop vans with a gross vehicle weight  $\leq$  3.5 tonne or 'white vans' are considered by many to be the work horse of our industry. These vehicles offer significant advantages over larger vehicles such as agility, flexibility and improved fuel efficiency. They can also be significantly easier to manoeuvre in residential and urban areas.

Access to these vehicles is significantly easier than larger commercial vehicles, costs are substantially cheaper and they can be driven by someone with a normal driving licence (subject to Driver CPC requirements). However, they have reduced load capacity which could result in the load capacity of the vehicle being exceeded. Operators should also consider if they can accommodate these vehicles at existing premises and facilitate safe loading/unloading.





## 8. Tail-lifts

The addition of tail lifts to commercial vehicles can be beneficial as they provide the opportunity to load/unload large items at locations without loading docks or appropriate mechanical handling equipment. However, some tail lifts prevent vehicles from being able to access loading bays which operators must consider.

Operators also need to consider the risks associated with working at height when using tail lifts, the reduction in load capacity through the addition of the tail lift and the potential for property damage. Operators must ensure there are robust systems in place to ensure the safe use of tail lifts including driver training.



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