Safe access to road-going vehicles: Specifying the right equipment

Information sheet WPT02

If you specify delivery vehicles, oversee their maintenance, or manage operations involving the loading/unloading of goods this information may help you understand why people fall from vehicles and how these falls can be prevented.

What types of vehicles are we talking about?

Goods vehicles of all sizes, including articulated or rigid bodies with open flatbeds or, curtain sided or rigid containment such as box vans.

Where is access needed?

Access will be needed to the cab, to the load area and to the fifth wheel during normal operations such as loading/unloading and for maintenance or cleaning. Don't forget access is also needed to specialist equipment such as the upper platform of double-decker trailers and lorry mounted cranes.

Cab steps

Height of first step

A bottom step which is too high can greatly increase the risk of injury while getting in and out of the cab:

- the more a person has to bend their knees, the less force can be produced by the leg;
- the greater the height a person has to step down from, the harder it is to lower the body in a controlled, slow way. This may increase the chance of ankle and spinal injuries.

The first step height should be no more than 700 mm off the ground, with 400 mm being the norm.

Step depth

The greater the step depth, the greater the chance that the user can gain a good footing on the surface. For this reason, steps are better than runged ladders so choose these where you can. Recommended tread depths are 200 mm for steps and ladders and 300 mm for stairs.

Step height and depth

Wherever you can, choose steps where the height and depth are the same, as this gives the user maximum confidence and safety.

Handholds

Handholds and handrails provide a grip for the hands, so forming part of the overall support system for getting in and out of the cab. Handrails are better than handholds because a hand can slide along a handrail without having to let go of the support completely.

Handrails can also provide support for people of different body sizes. You need to provide a combination of steps and handholds for a range of people from shortest to tallest – short people need to be able reach the handhold from the ground position.

Fifth wheel catwalk on articulated vehicles

Drivers, and occasionally maintenance workers, need to climb up onto the fifth wheel area to link up airlines and the electrical connections from the cab to the trailer unit. How often they need to do this will vary from a few times a day, to less than once a week for long-distance drivers.

First consider using sliding connections (Mavis rails) or other means for removing the need to work at height by enabling connections to be made at ground level. When specifying or retrofitting a catwalk, consider:

- the height of the first step and step depth – it may be difficult to achieve adequate step depth if the steps are set into the fuel tank;
- consistent levels, to avoid tripping (a difference in height as little as 10 mm can be a trip hazard);
- robust materials (some catwalks bend when walked on);
- handholds – in an easily accessible position;
- a big enough tread area to get a good footing (areas such as the fuel tank, chassis rails etc may not be covered by the catwalk, leaving an uneven or slippery surface for the driver to walk on);
- controlling contamination – positioning the filling point for the diesel tank away from the access to the catwalk to prevent the spread of diesel in case of a spillage;
- slip-resistant materials and a consistent surface (see Information sheet WPT03, listed in Further information). If people have to lift or push objects they need a better footing;

- the nature of the work undertaken. If a kneeling position is required, some slip-resistant surfaces are uncomfortable to kneel on.

Vehicle load area

How often workers need to get on and off the load area will vary according to the type of vehicle, type of load, method of loading/unloading and the need for sheeting etc. Where possible, choose a vehicle/loading system that minimises the need for access to the load area, using the hierarchy of controls for work at height.

If work at height is unavoidable, safe access should be provided, with preference to vehicle-based equipment:

- fold-out steps should be sturdy. These are a common retrofit solution. If they are flimsy or too small, they will not do the job. They should follow the principles set out in the section on cab steps;
- a suitable placed handhold should be fitted next to the steps. Rigid handholds are preferred over ropes or straps as they are less likely to fail during use;
- steps are better than ladders, they give a more secure means of access;
- side impact barriers or underrun bars are not usually designed as steps. The surfaces are not generally slip resistant. Their position under the body of the vehicle requires the person to swing out from the vehicle to climb up (and it is almost impossible to use them to climb down). It can also be difficult to position a usable handhold nearby;
- position access where it is most needed, ie side, rear and make sure other equipment does not get in the way of access points;
- if tail lifts are used for access to the vehicle as well as for load handling (see Information sheets WPT01 and WPT03) you should consider providing suitable handholds and guardrails.

If vehicle-based access is not possible, then a site-based provision may be a solution, such as pairs of platforms with access steps and handrails to provide access to the vehicle and a place to work from. If your vehicle is visiting sites run by other companies then you will need to discuss this with them to ensure that the necessary facilities to allow drivers safe access are available. Some companies planning to make a number of deliveries to construction sites take mobile platforms out to site for their vehicles to use during the period of the contract.

Further information

HSE website: www.hse.gov.uk
Workplace transport: www.hse.gov.uk/workplacetransport
Slips and trips: www.hse.gov.uk/slips
Falls from height: www.hse.gov.uk/falls

Tail lift specification guide for road vehicles SOE/IRTE 2005 (www.soe.org.uk)

Preventing slips, trips and falls from vehicles: The basics
WPT01 Information sheet HSE 2007
www.hse.gov.uk/pubns/wpt01.pdf

Selecting flooring materials to avoid falls from vehicles
WPT03 Information sheet HSE 2007
www.hse.gov.uk/pubns/wpt03.pdf

Selecting the right footwear to avoid falls from vehicles
WPT04 Information sheet HSE 2007
www.hse.gov.uk/pubns/wpt04.pdf

Managing work to avoid falls from vehicles
WPT05 Information sheet HSE 2007
www.hse.gov.uk/pubns/wpt05.pdf

Delivering safely: Co-operating to prevent workplace vehicle accidents WPT06 Information sheet HSE 2007
www.hse.gov.uk/pubns/wpt06.pdf

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165 Fax: 01787 313995 Website: www.hsebooks.co.uk (HSE priced publications are also available from bookshops and free leaflets can be downloaded from HSE's website: www.hse.gov.uk.)

For information about health and safety ring HSE's Infoline Tel: 0845 345 0055 Fax: 0845 408 9566 Textphone: 0845 408 9577 e-mail: hse.infoline@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

recycle
When you have finished with this leaflet please recycle it

50% recycled
This leaflet is printed on 50% recycled paper

Printed and published by the Health and Safety Executive WPT02 09/07 C500