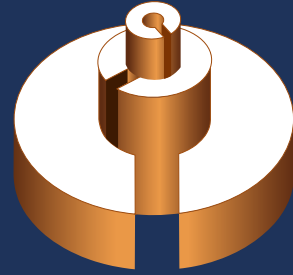


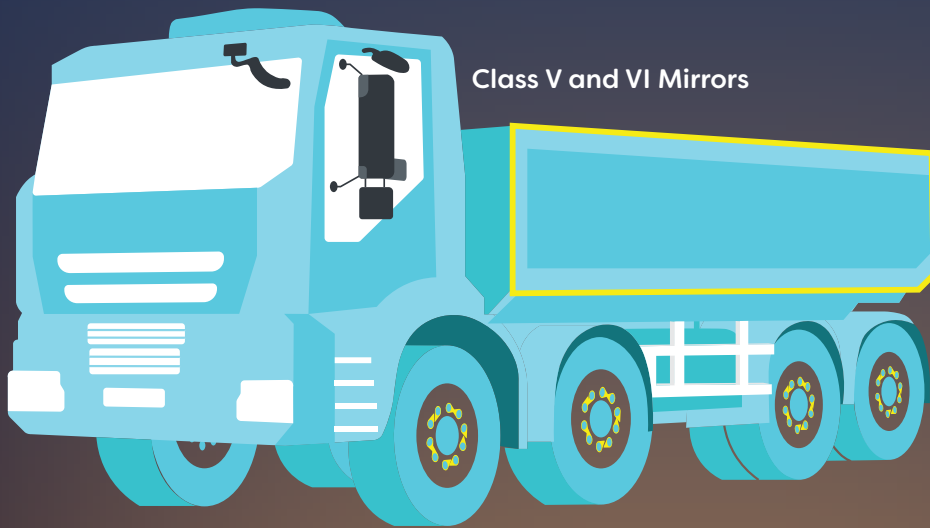
CLOCS-A

Heavy Vehicle Bronze Standard



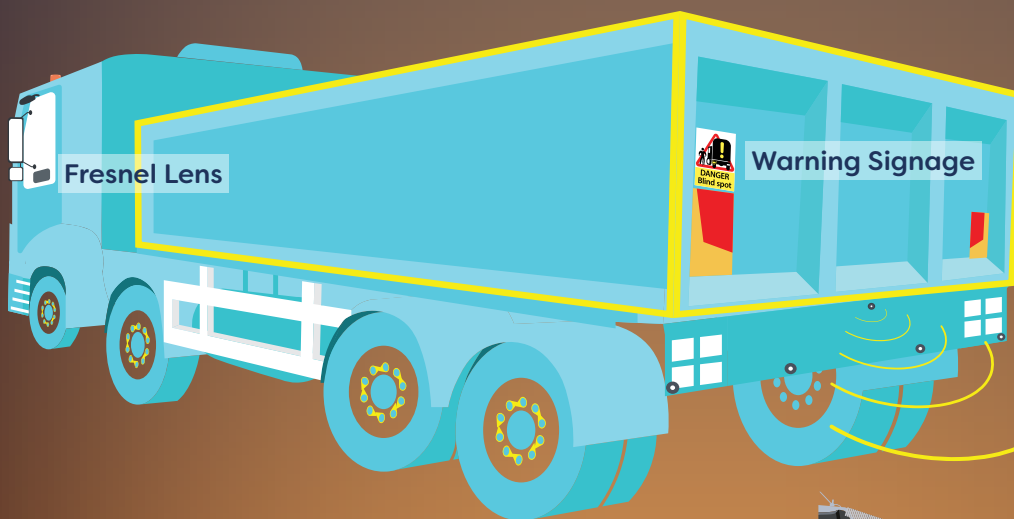
The Minimum Mandatory Standard for all heavy vehicles complying with CLOCS-A technical requirements. Measures and technologies that are relatively low cost and easy to implement.

 Amber Beacons



Conspicuity Marking

Wheel-Nut Position Indicators

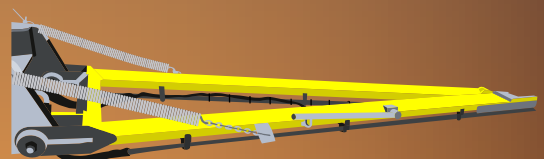


Fresnel Lens

Warning Signage

Rear Beeper
Rear View Cameras
or
Rear Sensors

Brightly-Coloured Drawbars
on Dog Trailers





Amber Beacons

Fit a revolving amber beacon to the roof of the truck cabin that can be seen from both sides and in front of the vehicle.

Pro: Flashing beacons are a relatively simple, low cost, low tech and reliable technology that has proven to be of universal benefit.

Con: These flashing beacons should be manually switched on and off each time the vehicle enters and exists the construction zone or workplace.



Class V and VI Mirrors

Fit a Class V mirror above the passenger window and a Class VI mirror to the cabin of COE trucks or to the front left corner of the bonnet on conventional trucks.

Pro: Class V and VI mirror are an inexpensive and reliable way of providing a view into these area.

Con: On bonneted trucks, the mirror may create a small blind spot itself – forward and to the left of the vehicle.

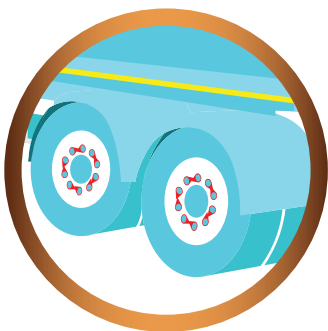


Conspicuity Marking

Fit hi-vis retro-reflective conspicuity marking tape to the sides and rear of trucks and trailers.

Pro: Retro-reflective markings don't need for any kind of power because light from headlamps of approaching vehicles is simply reflected back to the driver.

Con: Full contour marking for a large combination vehicle can be expensive.

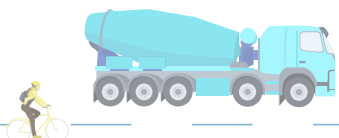


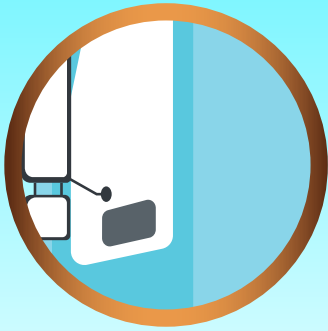
Wheel-Nut Position Indicators

Fit wheel-nut position indicators or wheel-nut retainers to all wheels on both trucks and trailers.

Pro: These plastic devices are cheap, reliable and very effective at identifying a nut that is coming loose.

Con: They may fall off or the colour may fade over time.





Fresnel Lens

Fit a Fresnel lens to the passenger door window or peeper window. It's purpose is to enhance the visibility and awareness of Vulnerable Road Users to the driver by implementing things that improve indirect vision.

Pro: Fresnel lens are cheap, quick and easy to fit, with minimal ongoing maintenance.

Con: Fresnel lens' cannot be used if the passenger window is open or may even interfere with the window opening.



Warning Signage

Fit warning signs to the left rear of trucks and trailers to highlight the potential dangers to Vulnerable Road Users. Minimum size of 300mm wide x 400mm high.

Pro: Signs are cheap, quick and easy to fit and replace as necessary.

Con: A cyclist may not be able to see the sign if it is not prominently displayed, cleaned regularly or is surrounded by other signs that cause confusion or distraction.



Rear View Cameras

Fit an in-cab screen and rear-facing camera to the rearmost heavy vehicle unit to monitor the situation behind the vehicle when reversing and/or tipping off.

Pro: Modern camera systems offer many advantages. The screens are now large, bright and very clear.

Con: Initial cost. Ongoing reliability and maintenance costs in a harsh operating environment (like tippers or concrete agitator trucks) are also a factor.

OR



Reversing Sensors

Fit an in-cab screen and rear-facing camera to the rearmost heavy vehicle unit to monitor the situation behind the vehicle when reversing and/or tipping off.

Pro: Considerable damage repair costs can be avoided as the system can help to prevent reversing into object.

Con: It is important that drivers should not become over-reliant on such systems and remain vigilant in the event that the system fails for some reason.



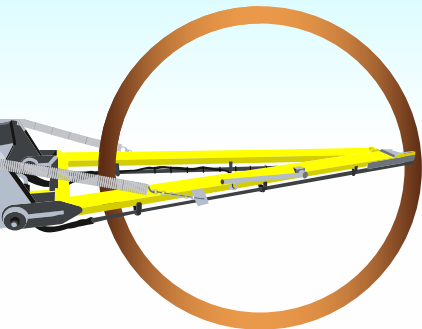


Reversing Beeper

Fit a reversing beeper to the truck and/or trailer. The purpose is to enhance the awareness of trucks to Vulnerable Road Users by audible means.

Pro: Reversing alarms are a cheap, reliable and effective method of warning site workers and Vulnerable Road Users that a nearby heavy vehicle is reversing.

Con: All alarms create some noise pollution in urban areas.



Brightly-Coloured Drawbars

Paint drawbars on dog trailers a bright yellow (such as Pantone PMS 109C) to improve conspicuity of this vehicle danger zone.

Pro: Brightly painted drawbars can improve conspicuity without the need for any kind of power or technology.

Con: Initially need to re-paint existing drawbars, and then re-paint from time to time as the paint wears at the front end of tipper drawbars.

External Cab

No devices or equipment attached to outside of the truck cabin that serve to reduce direct vision for the driver. Such devices include:



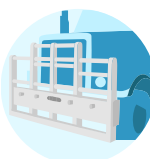
No bug deflectors on bonneted trucks



No unsuitable sunvisors



No engine air intakes above bonnet level



No unsuitable bullbars

Internal Cab

No fitment of inappropriate after-market cabin accessories or modifications that serve to reduce direct vision for the driver. Such devices include:



No decals attached to the windcreens



No fitment of aftermarket accessories that unreasonably restrict the driver's field of view



No excessive windscreen or window tinting

