

Following a recent near miss with a high potential for injury or property damage, the purpose of this alert is to raise awareness of the potential hazards involved when using steel plates and to learn the lessons from this near miss to avoid a reoccurrence.



What happened?

A steel plate, which had been installed to allow the road to be temporarily returned to use within our roadworks section, was partially dislodged by a HGV that was travelling at speed.

Steel plates were installed by the crew both longitudinally and transversally to allow vehicles to pass safely over an excavation within our roadworks. However, on this occasion the plates were not securely fixed to the road surface. Vehicles passed over the plates without incident, however the HGV travelling at speed caused the plate to move. The displacement resulted in a portion of the excavation becoming partially exposed. The crew immediately stopped traffic. The plates were checked and securely fixed in place. Once the fixings had been bolted into place, temporary tar was laid around the edges of the plates. The plates were then re-checked to ensure that the controls were suitable and sufficient to prevent a reoccurrence, before the section was reopened to traffic. No damage was caused to the vehicle or any other property and no injuries were sustained.



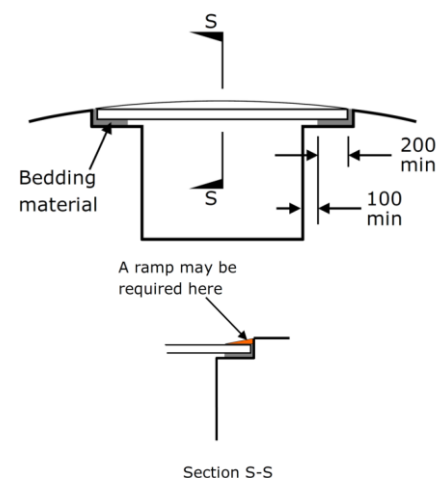
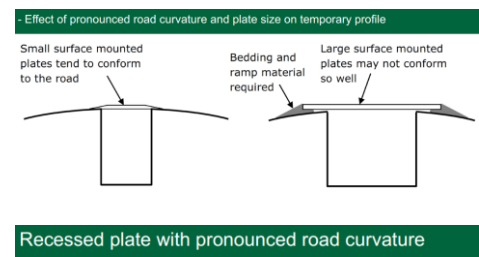
Plain steel plate with anti-skid coating

Table 1 - Typical minimum plate thicknesses in mm

Plate width (m)	Free span (m)										
	0.7	0.8	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.4	2.8
1.0	22	24	25	27	30	32	35	37	40	43	47
1.25	20	21	23	24	27	29	31	33	35	39	42

What do we need to do to learn lessons from this near miss?

- When using steel road plates, best practice advises to create a recess at the surface to lay the plates into. This may require some bedding material to be placed beneath the plates.
- When creating a recess is not possible or appropriate or laying of the plate is on an uneven surface, the steel plates must be secured at the fixing points (each corner) and bedding installed.
- Each time they are replaced, it may be necessary to apply further bedding material and, where recessed, fill the gaps between the plates and the edges of the recess.
- Where asphalt ramps are used to smooth the transition from road to plate, they may need to be occasionally reformed during the life of the works in order to ensure they continue to be effective.
- Plates must be fit for purpose, be free from any damage that may compromise their usability and must resist displacement induced by traffic loading in normal use.
- See the advisory leaflet (UK "traffic advisory leaflet 6/14 – using road plates at roadworks") for further information on options available, the scenarios that may be encountered and best practice regarding the various proprietary systems on the market.
- If any doubt exists or if you are unsure of what is required, stop work temporarily and notify the Project Manager/person in charge (PIC). If a review is required: **Stop, review, re-brief.**



We all have the authority to stop any work or behaviour that we deem to be unsafe to ourselves or our colleagues. NOTHING is more important than ensuring that everyone goes home safely every day.

If you have any queries on this alert, please contact hsqe@coffeygroup.com