

Shared Learning

COSTAIN
The Thameslink Programme

 Issue Date: 28th Sept 2015 - For further info contact sharon.fink@networkrail.co.uk

Issue Number: TLP042
Title: Paraslim – Potential Fall from Height

Overview of Event:

Work was being carried out to remove Paraslim sections from the southern elevation of a bridge deck when a Scaffolder stopped onto an unsupported section of ply board which gave way. The scaffolder suffered minor leg and hand injuries as his lower leg went down into the opening. There was potential that he could have fallen through the gap. The drop is 8.0 metres.

Causes:

Immediate - The Scaffolder stepped on unsupported unprotected ply infill with the potential to fall through the hole resulting in minor leg injuries.

Root and Underlying Causes

- Design - The design of the Paraslim requires 6" x 3" timbers to be installed to bridge the gap where the Paraslim aluminium beams do not butt together where the end - cast plates are positioned on the bridge deck. The 6" x 3" timbers were removed as part of the striking process and because the plywood resting on top of these timbers had no support the plywood gave way when the scaffolder stood on it.
- Procedure - The TBS did not adequately detail the sequential steps for the striking of the Paraslim. The event occurred because the two activities were carried out 'out of sequence' – the carpenters struck the infill first before the exclusion zone was established at deck level.
- Procedure - The procedure for striking of the Paraslim was not followed by the carpenter crew. The task briefing sheet (TBS) identified that an exclusion zone / edge protection must be in place prior to any striking of the Paraslim. This was not done by the carpenters who commenced striking prior to the Scaffolders completing the edge protection / exclusion zone.
- Communication: There was no engagement at the task briefing with the work crews which would have identified the sequence of work.

Photo of Event :

The area immediately after the event – the gap was 400mm



Actions Taken As a Result of the Investigations:

- Work on the Paraslim was suspended pending a review on the methodology of works.
- All other Paraslim sections were checked and inspected for security.
- A review was undertaken of all similar works.
- Review undertaken of the adequacy of all Permits to Unload.
- Safety stand down and briefing was carried out with all the relevant trades.
- Full workforce was briefed on the initial findings.
- The TBS for Paraslim striking now includes the coordination of the teams involved: carpenters, scaffolders and slingers. The TBS includes a prescriptive safety critical sequence of work.
- Design is to be reviewed

General Key Messages:

- Co-ordination of activities – where there is a complex construction (or deconstruction) sequence, all parties involved must understand the interdependencies of each sequence.
- Temporary works activities must be coordinated by the project team and understood by those carrying out the works.
- Where exclusion zones are required set up and management of these must be controlled