



## Description of Event

*Installation of non-compliant barrier will not provide assurance that the significant fall from height risk has been mitigated against.*

### Population at Risk

Construction and Maintenance Workers, Inspectors and Travelling Members of Public (MoP)

### Hazardous Activity and Residual Risk Description

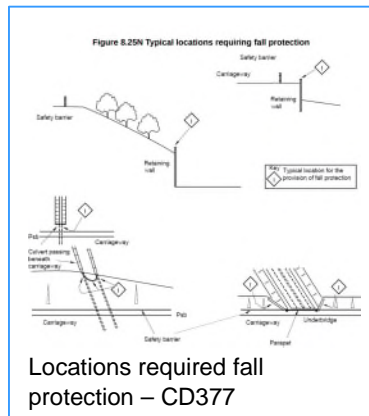
- Footway/c fences are crucial for identifying boundaries, especially near drop-offs like bridges and retaining walls. Post-and-rail fences are not designed for fall protection.
- Steel guardrails are specifically designed to be part of the pedestrian restraint system, ensuring optimal safety for pedestrian.
- To ensure maximum safety for pedestrians especially near drop-offs, standardised steel guardrails are required. While post-and-rail fences made of timber might exist, their lack of integration with the pedestrian restraint system render them inadequate and non-compliant with British Standards.



A wood pedestrian fencing on Highway

### Potential consequences of this event

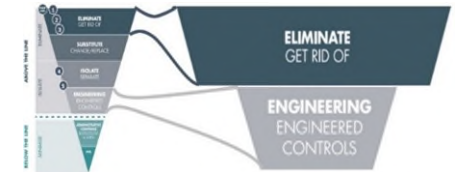
- There are concerns about the durability of timber for pedestrian and cycleway fences, particularly near drops. Timber has a relatively short lifespan, and its construction can become compromised or damaged over time. This increases the likelihood of fence failure, which could lead to falls.
- 50 % of all construction work fatalities were due to fall from height (HSE 2021 stats.)



### Potential Mitigation Measures

#### Design

- Pedestrian restraint systems must comply with BS7818. This ensures the system is robust and capable of safeguarding pedestrians.
- Clause 8.25, CD377 Revision 4 - *Pedestrian restraint and protection, shall be specified where any pedestrian movement can occur and there is a risk to health and safety from a fall from a height.*
- Clause 8.26, CD377 Revision 4 - *A structure, presents a vertical or near vertical face 1.5 m or more in height, a pedestrian restraint system such as a protective barrier or guardrail shall be installed close to, or on top of, the structure.*
- Designers have the responsibility to undertake risk assessment in the area to determine any potential risk of fall from height in the area.
- Designers should identify the specific requirements for fall protection on their drawings.



#### Construction

- For the duration of construction works, particularly near drops, access to the area should be completely restricted.
- To ensure public safety and deter trespassing, temporary barriers and diversion routes should be installed along with clear diversion signage.
- If the design of the pedestrian restraint system appears unreasonable or inadequate, particularly near drops, always consult with the designer for clarification or potential modifications.

#### Maintenance

- Review asset to ensure minimal maintenance and assess like for like replacement strategy.

#### Further Guidance and Reading

- [CD377](#) – Requirements for road restraint systems
- [Series 400](#) – Road Restraint Systems
- [BS7818](#) – Specification for pedestrian restraint systems
- [WLD11 - When is a Fence not a Fence?](#)



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LEAN

Alternative Materials

Improved end user benefits

Reduced Defects

Reduced Reportable Accidents