

Substation flooring

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Applicable to	All colleagues and contractors

In July 2020 a colleague narrowly escaped injury when a section of the substation floor gave way from underneath them whilst using a ladder. Upon investigation it was identified that a cable trench lay underneath the section of floor where the individual was on a ladder. The trench had been backfilled with a light sand and cement screed.



Historically, a number a cable trenches were backfilled in this way to allow a simple breakout of the trench if needed for operational purposes. Over time, if the sand in the cable trench compacts, a void maybe created between the sand and cement screed presenting the risk of collapse if weight is applied to this area. The practice of backfilling cable trenches today is more robust; the cable trench is blind sanded and topped with chippings. This method does allow for ease of access in the event of an operational requirement but does not present the same risk of a void forming.

When working in a substation, colleagues should assess the flooring before undertaking any work. Where possible avoid standing on any section of flooring where screed has been applied and avoid using a ladder. In the event standing on a section of screed flooring is necessary, a sound test should be conducted before any weight is applied to check if it is hollow underneath. All instances of hollow sections should be reported to CivilTeam-WorkPlanning@enwl.co.uk and the area demarked using barriers or cones.

Key Points to Remember:

- Assess your environment, including flooring, when accessing a substation.
- Identify any section of screed flooring and apply defensive behaviours.
- Always assume a section of screed flooring is hollow unless proven otherwise.
- DO NOT use a ladder on any area of screed flooring.
- Report any concerns to the Civil Team and always use barriers or cones to highlight any hazards pending remedial action.

