
Working platforms for tracked plant:

**good practice guide to the design,
installation, maintenance and repair of
ground-supported working platforms**



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Foreword

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Although serious incidents involving working platforms are relatively rare, fatalities have occurred. This guide is intended to promote safety in the design, installation and operation of these platforms.

The Federation of Piling Specialists (FPS) has initiated a drive to improve practices related to the use of piling and associated specialist plant; the guide has been prepared at the instigation of the FPS following the recognition of the need for safety initiatives to improve the approach to the provision of working platforms. In using the guide, it should be recognised that these platforms are subject to complex loading conditions and are difficult to design; specialist advice is needed. This guide is not intended to replace or reduce the designer's input, but rather to promote the implementation of minimum design, installation, maintenance and repair standards.

The guide was prepared under a contract let by FPS to Building Research Establishment Ltd (BRE). A co-ordinated approach to the problem was required involving the whole construction supply chain. BRE is pleased to acknowledge those who have helped in the preparation of the guide.

The guide has been prepared by a BRE project team working under the direction of a Steering Group appointed by FPS.

The Health and Safety Executive (HSE) has worked closely with the FPS and supports the principle of reducing accidents by the use of properly designed, prepared and maintained working platforms.

1 General

1.1 Scope of guidance

- Definitions
- Nature, applicability and status of guidance
- Limitations of good practice guidance

The expression *working platform* is restricted to ground-supported working platforms, for tracked plant, constructed of granular material. No other type of working platform is considered. The working platform is taken as including not only the platform itself but also the associated ramps and accesses.

The guidance has sought to avoid being over-prescriptive as this might limit the scope for innovation and the development of cost-effective solutions. The guide is an enabling document and does not form a code of practice. The guidance does not in any way limit the responsibilities of those parties involved in the design, specification, installation, operation, maintenance and repair of a working platform.

While the guide describes good practice in general terms it cannot deal with every eventuality and site condition (see *Further research* on page 13). A formulation of good practice can be of value only where it is applied with careful supervision, control and monitoring of the platform on site under appropriate contractual arrangements. **All parties have to exercise their own knowledge, experience and judgement.**

1.2 Objectives of guidance

- Principal objective is to promote safety
- Secondary objectives include economy and sustainability.

Working platforms are critical for plant stability, and safety is a vital issue¹. Most working platforms perform well, but overturning of rigs has occurred more frequently than it should. The principal objective of this guide is to facilitate the design, specification, installation, operation, maintenance and repair of working platforms so that an acceptable level of safety is achieved.

While the principal objective of the guide is safety, a secondary objective is that safety should be achieved without unnecessary or excessive expenditure. Although this is a secondary issue from the standpoint of this guidance, it is certainly not a minor issue since in many applications the cost of the working platform is a significant proportion of the total cost of the process, such as piling or ground treatment, for which the platform has been installed. In many cases a good-quality platform also improves the performance of the construction processes using it.

For the construction of working platforms, the tenets of sustainable construction require the excavation of natural materials to be minimised and the use of waste materials to be maximised. These objectives can be achieved in a number of ways. Working platforms should not be larger than they need to be and material specifications should not prevent the use of those recycled or secondary materials which will perform satisfactorily. Many working platforms are used in subsequent construction phases and the design should be checked to ensure that it is appropriate for these uses and conditions.

¹ See also *Crane stability on site*. CIRIA C703 second edition. Lloyd D (ed) (2003).



Courtesy of Bachy Soletanche, reproduced with the permission of BAA

Photo 7 Placement of reinforced platform in layers



Courtesy of Bachy Soletanche, reproduced with the permission of BAA

Photo 8 Good control during platform installation – unfinished areas fenced off to prevent access



Courtesy of Stant Foundations

Photo 9 The complexity of normal operations on a working platform requires appropriate site management

About this guide

Most ground-supported working platforms perform well; they are critical for plant stability, and safety is a vital issue. However, overturning of rigs has occurred more frequently than it should. As part of a drive to improve practices related to the use of piling and associated specialist plant, the Federation of Piling Specialists instigated preparation of this guide.

The guide is intended to promote safety in the design, specification, installation, operation, maintenance and repair of working platforms. A secondary objective is that safety should be achieved without unnecessary or excessive expenditure.

The guide highlights important issues in site assessment, design, installation and maintenance of working platforms. Design calculations are given, together with worked examples for different subgrade properties.