Working Platform Certificate

Project Name	
Work site	
Section / Activity	

Part 1 – Working Platform Design Parameters

Equipment to be used on site		Track width (m)
	Case 1	Case 2
Unfactored bearing pressures (kPa)		
Effective track length (m)		

Note: These design pressures have been calculated in accordance with the method promoted by the Piling & Foundation Specialists Federation and made available on www.pilingfederation.org.au. This is based on BRE Report 470 (2004) – *Working platforms for tracked plant* and BS EN 996:1995 – *Piling equipment – Safety requirements*.

Part 2 – Working Platform Design and Installation

Designer's name	
Designer's Organisation	

The working platform on the above stated work site has been designed in accordance with the methods set out in _____, installed in accordance with that design, and tested, where appropriate, to safely support the equipment detailed on this certificate and it will be maintained and repaired, and reinstated to the as installed condition after any excavation or damage, throughout the period when the equipment is on the site. Overall stability has also been checked.

Signature		**Name**	
Position		**Date**	
Organisation	Principal contractor	**Address**	

Note: A completed copy of this certificate signed by the Principal Contractor must be given to each user of the working platform prior to commencement of any works on site.

Received by Signature		**Name**	
Position		**Date**	
Organization	Piling Contractor		

Guidance on piling platforms

1. Design

1.1. The stability of piling rigs and associated plant is primarily dependent upon the provision of a suitable and sufficient working platform. It must be properly designed and installed to a recognised standard. Guidance for this is provided by the BRE in a report commissioned by the FPS entitled "*Working Platforms for Tracked Plant – Good practice guide to the design, installation, maintenance and repair of ground supported platforms*".

1.2. Whilst the same type of rig may be operated by different companies the bearing pressures may differ due to the specific configuration of operation of the rig or modifications. The detailed bearing pressures will be provided by the piling contractor in advance of work commencing.

1.3. The design is extremely sensitive to the bearing pressure and type of fill used in the platform. For example changing the angle of friction of the fill from 35 degrees to 45 degrees can halve the platform thickness required. It is therefore proposed that tests are performed on different fill materials in the field.

1.4. The working platform must be free draining to prevent the build up of water and slurry.

1.5. In the case of fine-grained subgrades, a separation/filter membrane should be installed beneath the platform material. This will inhibit 'pumping' and infiltration of the fine-grained soils up into the platform material during wet weather (which can impair platform performance and increase maintenance costs).

1.6. Proof testing of the platform can be carried out with a 600mm diameter plate subject to the maximum design loading (maximum test load typically 12-15t, often provided by a crawler excavator). Coupled with a cautious design approach, such testing should highlight any gross inconsistencies in platform performance. Potentially significant savings in platform thickness and cost can be realised by adopting a more detailed testing strategy.

1.7. The working platform must have a specified design life which starts before delivery of the piling equipment and ends on completion of all piling works. This includes load testing, integrity testing, investigation of non conformances and any remedial works.

2. Installation

2.1. The PFSF Platform Certificate is recommended for all sites where a piling rig or attendant plant operates. It must be signed by an authorised representative of the Principal Contractor. This merely confirms that the legal duties required under State specific workplace health and safety acts and regulations have been carried out.

2.2. If the working platform is to be constructed or removed in phases while piling works are on-going, then the extent of the platform must be clearly defined on the certificate (see sketch plan) and if necessary physically on site. This is particularly important where the piling mat is removed from an area previously made available to the piling contractor.

2.3. The working platform provides access for all piling plant, ancillary plant, deliveries, sub-contractors and personnel associated with the piling operations. Properly installed it will also provide suitable and safe access for following trades for the whole project.

2.4. One of the main causes of rig instability is a result of poor definition of the edge of the working platform. In general the working platform should extend at least 2m beyond the pile position/edge of the building. This ensures sufficient safe working area for the piling personnel and attendant plant.

2.5. Where access ramps are used to move between working levels these must be of sufficient width and small enough gradient to allow the piling plant to move safely with the stability constraints of the machine. Ramps must be in a straight line between working areas. Piling rigs and cranes cannot change direction on ramps. Where a change in direction is required, this must be on a flat level platform.

3. Maintenance, repair and reinstatement

3.1. The working platform must be kept free draining. Water and slurry which is allowed to build up on the working platform can hide recently constructed piles, trip hazards, unstable ground and excavations. Slurry can be transferred to personnel and PPE which increases the risk of slips on steps as well as difficult handling of work tools.

3.2. Obstructions encountered during the piling process will generally require excavation to remove them. This can create a 'soft spot' which can result in the rig overturning. It is important that any excavations made in the working platform are reinstated to the designed standard. This is a major root cause of piling rigs overturning.

3.3 The working platform shall be subject to regular inspection by a competent individual appointed by the Principal Contractor throughout its design life and after any reinstatement, works or events which might have modified it. Any damaged or inadequate areas identified must be reinstated to the designed standard. Following any repair or reinstatement the Working Platform Inspection Log shall be signed by an authorised representative of the Principal Contractor and issued to the specialist contractor with a layout drawing of the working platform amended as appropriate. Significant repair or reinstatement works or additions to the working platform area will require a new Working Platform Certificate.

Limitations on Operational Conditions

The following limitations on operational conditions have been assumed in the calculation of the tracked rig bearing pressures. IT IS ESSENTIAL FOR SAFETY THAT THESE CONDITIONS ARE FOLLOWED ON SITE.

1. To be completed when rig bearing pressures are calculated
2.
3.
4.

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SKETCH PLAN OF WORKING PLATFORM

Preferably include the plan certified by the Designer

Working Platform Inspection Log

(to be completed by an authorised representative of the Principal Contractor)

Date	Organisation	Name & Position	Signature	Comments (include key details of reinstatement and repair and drawing reference – if issued)

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