

# MANHOLE SAFETY PLATFORM





# MANHOLE SAFETY PLATFORM

## Contents

Introduction	3
General Guidance Notes	4
Component Identification	7
Installation	8
Basic maintenance	9
Do's & Don'ts	9

# MANHOLE SAFETY PLATFORM

## 1.0 - Introduction

This booklet is intended to provide basic information for users of the Pro-Mech Hire Ltd Manhole Safety Platform system and to draw the client's attention to the practical aspects of Manhole Safety Platform operational procedures and basic maintenance which need to be considered when compiling method statements, risk assessments and safe system of works. It is assumed that clients are familiar with general safe practices applicable to this type of work.

The Manhole Safety Platform system is intended to act as a safety platform on top of concrete pre-cast manhole rings. It is not intended for other purposes.

It is advisable, before commencing installation, to read the notes below and to become familiar with the procedures involved when using the Manhole Safety Platform.

The Manhole Safety Platform systems should not be used in seawater applications without prior consultation with the Pro-Mech Hire Ltd. Engineering Department.

This booklet is intended to provide basic information for users of the Pro-Mech Hire Ltd Manhole Safety Platform system and to draw the client's attention to the practical aspects of Manhole Safety Platform operational procedures and basic maintenance which need to be considered when compiling method statements, risk assessments and safe system of works. It is assumed that clients are familiar with general safe practices applicable to this type of work.

The Manhole Safety Platform system is intended to act as a safety platform on top of concrete pre-cast manhole rings. It is not intended for other purposes.

It is advisable, before commencing installation, to read the notes below and to become familiar with the procedures involved when using the Manhole Safety Platform.

The Manhole Safety Platform systems should not be used in seawater applications without prior consultation with the Pro-Mech Hire Ltd. Engineering Department.

# MANHOLE SAFETY PLATFORM

## 2.0 - General Guidance Notes

### 2.1 - Safe System of Work and Method Statement

Assuming that the appropriate Manhole Safety Platform has been selected for use, the Health and Safety at Work Act requires that a safe system of work is adopted to carry out the works on site.

These guidance notes are intended to draw the client's attention to practical aspects of Pro-Mech Hire Ltd.'s range of Manhole Safety Platform components during use and basic maintenance which need to be considered when completing method statements for a safe system of work.

In particular, the client's attention is drawn to the size and weights of components and the need for planning the lifting operations involved.

All major components of the range of Manhole Safety Platform are fitted with lifting lugs for safe slinging.

**NOTE:** All equipment must be disassembled prior to lifting.

### 2.2 - Access, Hardstanding Areas and Site Storage

- Suitable firm, level, dry areas should be made available on site for storage and pre-assembly work.
- Suitable lifting equipment of adequate capacity should be provided for off-loading and installation.
- Slinging should always be carried out by suitably experienced and competent personnel.
- The weights of components and assemblies are given in Sections 4 and 5 of this guide.

Large components should be stacked, nested with suitable timber dunnage.

Smaller components should always be stored in the storage compartment when not in use.

### 2.3 - Personnel

The Management of Health and Safety at Work Regulations require that personnel deployed are suitably trained, experienced and supervised by a competent person. All lifting operations are to be controlled by an appointed person in accordance with BS 7121 and LOLER regulations.

The main activities associated with Manhole Safety Platform use are:

Unloading and loading the delivery vehicle.

Bolting up and pinning components together.

Slinging and lifting the Manhole Safety Platform into position.

### 2.4 - Plant and Lifting Equipment

A suitable appliance is required for off-loading, installation and re-loading of equipment, together with lifting chains, available from Pro-Mech Hire Ltd., of suitable length and capacity and with current certification.

**WARNINGS:** If an excavator is to be used to for lifting operations, refer to safety information in Section 2.5. If Manhole Safety Platform components are to be lifted in or around an excavation, the appliance should be located at a safe distance from the edge of the excavation and the lifts and radii checked against the safe lifting capacities of the appliance.

A surcharge for the appliance must have been allowed for in the excavation brief / design.

No more than one assembled component must be lifted at a time.

# MANHOLE SAFETY PLATFORM

## 2.5 - Sling Warning

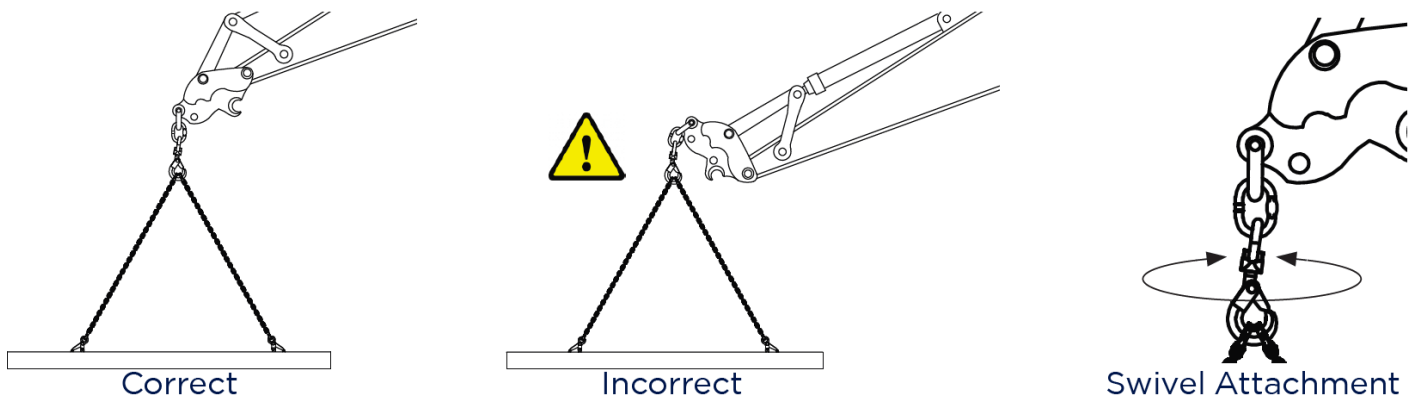
If a sling is to be used on an excavator, be aware of the following:

It is very important that a means of allowing the sling to swivel be introduced above the master (top) ring. This will allow the sling, and in particular the master ring, to turn and align with the load.

Without a swivel arrangement, the load may severely twist the master ring, resulting in damage or failure.

All lifting accessories attached to the excavator lifting point must hang freely and be free to move at all times.

Tilting the head of the dipper arm / quick hitch upwards may prevent freedom of movement and so twist, damage or fail the lifting equipment.



Pro-Mech Hire Ltd. offer an 8 tonne single leg swivel attachment, available upon request.

Code: SSBA-007, bearing to bearing length: 600mm, weight: 11 kg. Please see separate user guide for more information.

## 2.6 - Small Plant, Tools and Lifting Chains

- Lifting chains of suitable lifting capacity, hook size, leg length and current certification should be used. Pro-Mech Hire Ltd can supply 7mm chain diameter, 4 leg 4.0m long chain slings (Code: PSP-155/SH) Weight: 47 kg. Refer to Lifting Chain user guide for further information.
- A small lump hammer may be required to secure the Pins and 'R' Clips.

## 2.7 - Access & Egress and Edge Protection

Install the edge protection as soon as possible before entry into the excavation and onto the platform base plate.

A competent person should inspect the means of access and egress regularly.

## 2.8 - During Installation Works

Check that all pinned connections are intact and complete with an 'R' clip, where required.

Avoid striking equipment or loading it inappropriately, i.e. laterally loading it by storing materials or by handing or propping from them.

## 2.9 - After Installation Works

Each Manhole Safety Platform must be inspected daily before personnel begin work.

## 2.10 - Return of Equipment Off-Hire

Clients should ensure that on removal, the equipment is returned clean and assembled as supplied.

# MANHOLE SAFETY PLATFORM

## 2.11 - Transportation

Ensure all equipment is loaded to the satisfaction of the vehicle driver and is securely restrained to the vehicle bed.

## 2.12 - References

### 2.12.1 - Legislation

The Health and Safety at Work Act 19742

### 3.12.2 - Regulations

Management of Health and Safety at Work Regulations (MHSW) 1999

Construction (Design and Management) Regulations (CDM) 2015

Lifting Operations and Lifting Equipment Regulations (LOLER) 1998

Work at Height Regulations 2005

Noise at Work Regulations 2005

Manual Handling Regulations 2012

### 2.12.3 - British and European Standards

BS 6031 : 2009 - Code of Practice for Earthworks

BS EN 996 : 1996 - Piling Equipment. Safety Regulations

BS EN 1997-1 : 2004 - Code of Practice for Foundations

BS 5228-1 : 2009 - Code of Practice for Noise & Vibration Control on Construction & Open Sites : Noise

BS 5228-2 : 2009 - Code of Practice for Noise & Vibration Control on Construction & Open Sites : Vibration

### 2.12.4 - HSE Guidance

Health and Safety in Construction (HSG150)

A Guide to Managing Health and Safety in Construction - ISBN 0 7176 0755 0

Safe Work in Confined Spaces - Regulations, Approved Code of Practice and Guidance - L101

Risk Assessment - A Brief Guide to Controlling Risks in the Workplace - INDG 163

Excavators Used as Cranes - Guidance Note - PM42

### 2.12.5 - Other Guidance

CPA Guidance - Safety in Shoring - The Proprietary Shoring and Piling Equipment Manual

CPA (STIG) Guidance - Be Safe - Shore

CPA (STIG) Guidance - STIG 0201 : Selection of Proprietary Shoring Equipment

CPA (STIG) Guidance - TIN 204 : The Correct Use of Lifting and Other Attachment Points for Shoring Equipment

CPA Safety Guidance - Risk Assessment (SG 003)

CPA Safety Guidance - Guidance on Lifting Operations in Construction when Using Excavators Ref SG001(3)

CIRIA - CDM 2015 - Workplace 'in-use' guidance for designers, second edition (C756)

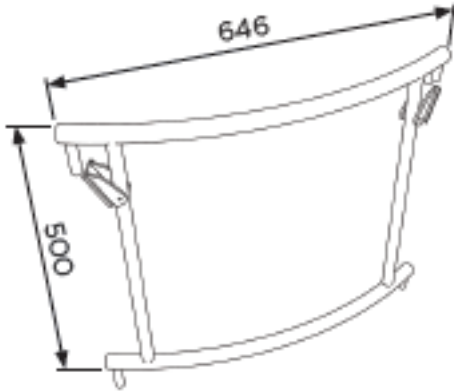
CIRIA Report 97 - Trenching Practice

CIRIA Special Publication 131 - Crane Stability on Site

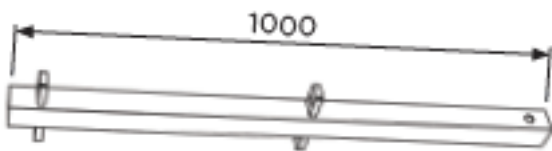
CIRIA Special Publication 95 - The Design and Construction of Sheet-Piled Cofferdams

# MANHOLE SAFETY PLATFORM

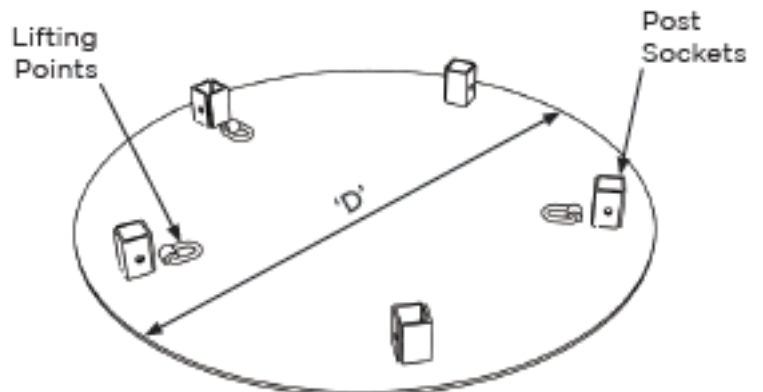
## 3.0 – Component Identification



Handrail Barrier



Handrail Post



Platform Base Plates

Ring Size (mm)	Base Plate Dia. 'D' (mm)	Weight (kg)
1050	1220	200
1200	1400	170
1350	1574	240
1500	1730	255
1800	2030	280
2100	2370	450
2700	3000	705

# MANHOLE SAFETY PLATFORM

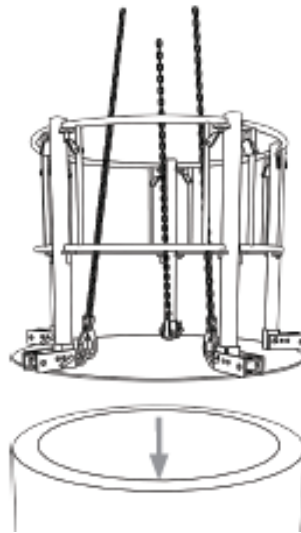
## 4.0 - Installation and Removal Details

### 4.1 - Preliminaries

If site assembly is required, assemble the platform as detailed in section 5 on level ground in a safe area away from the excavation. However do **NOT** install the locking shoe pins.

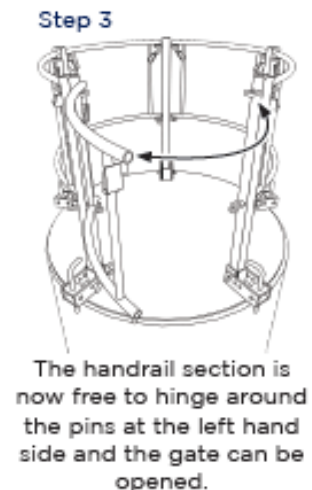
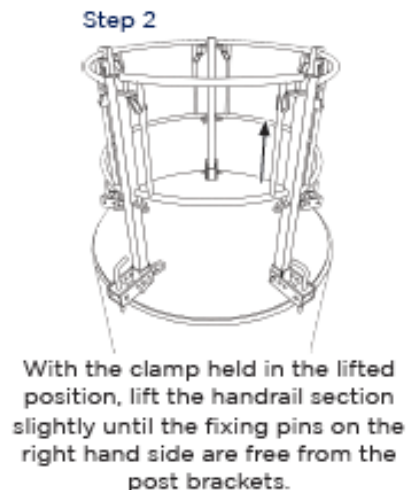
### 4.2 – Lifting the Pre-Assembled Platform

- Lift the pre-assembled Manhole Safety Platform onto the top of the pre-cast manhole ring by attaching suitable lifting chains to the lifting points on the base plate.
- When the platform base is on the manhole ring, insert each locking pin into the locking shoes and secure with an 'R' Clip. This will help prevent the platform moving sideways.



### 4.3 - Handrail Gate Openings

Each handrail section can be used as a gate for access onto or off the platform and the gate will hinge both inwards and outwards for ease of access. To access the platform from the outside, follow these steps: (**NOTE:** To open the gate when exiting the platform the locking clamp is on the left hand side of the handrail)





# MANHOLE SAFETY PLATFORM

## 5.0 – Basic Maintenance

- Regularly check pins and 'R' Clips are fitted secure
- Ensure components are stored in a clean, dry area.

## 6.0 - Important Points

**IMPORTANT NOTE:** Failure to observe the following points could result in serious bodily injury.

### 6.1 - Do's and Dont's

**DO** ensure that all handrail sections are in place and correctly secured with the pins and locking clamps whilst working on the platform to prevent unintentional opening.

**Do NOT** use damaged components.

**Do NOT** enter the platform until all of the locking pins are installed.