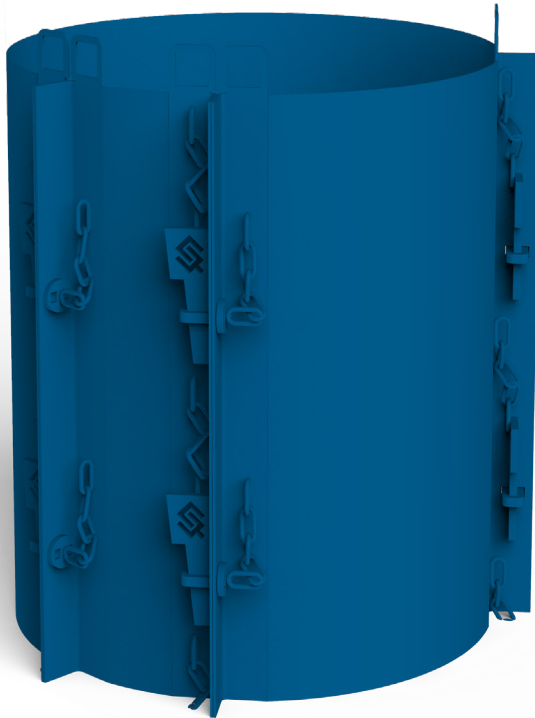


User Guide

# Manhole Shutters

---



## Product Information

### **Overview**

---

The Conquip Manhole Shutters are simple to assemble, pre-formed, steel shutters to assist with pouring of concrete manhole surrounds.

They are designed for use as a temporary shutter when casting a concrete surround around precast concrete manhole rings. Complete with an easy locking mechanism, Conquip Manhole Shutters can be used with concrete manhole ring sizes from 675mm to 2700mm.

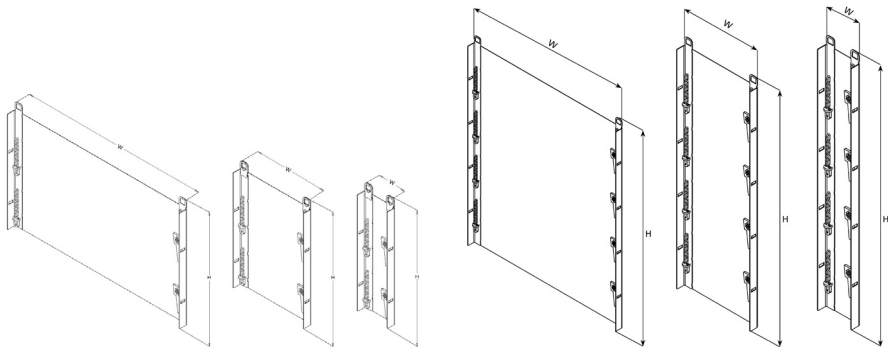
Manufactured in the UK from quality British and EU steel.

Conquip supply a full range of Trench Shoring, from Manhole Boxes to Trench Boxes and edge protection.

# Product Information

## Specification

Item	Product Code
Manhole Shutters A 900	TL900075
Manhole Shutter B 900	TL900076
Manhole Shutter C 900	TL900077
Manhole Shutters A 1800	TL900018
Manhole Shutter B 1800	TL900019
Manhole Shutter C 1800	TL900020



<sup>1</sup>Working Load Limit

Product Code	Height	Width	Weight
TL900075	900mm	1530mm	30kg
TL900076	900mm	620mm	20kg
TL900077	900mm	250mm	15kg
TL900018	1800mm	1530mm	66kg
TL900019	1800mm	620mm	36kg
TL900020	1800mm	250mm	27kg

# Original Working Instructions

## Usage Instructions

---

### Important Usage Notes

- Prior to use, ensure that each panel is in good condition and is free from concrete. Also check that each panel has pin and wedge fastenings attached. (There should be 4 of each per panel)
- To transport the shutters only lift using the lifting points. DO NOT attempt to stack one complete shutter on top of another to achieve extra pouring height.
- Only lift the shutters by the lifting points.
- Do not attempt to stack the shutters on top of each other
- to achieve additional pouring height.
- Do not get inside the shutters.

### Assembly and Installation Instructions

1. Coat the inside faces of the panels with release agent to prevent the concrete from sticking.
2. Assemble the shutter with the correct number of panels required.
3. Bring the flanges of the panels together and insert a pin through each hole in the flange and then drop a wedge into the slot in each pin.
4. Once all pins and wedges are in place, carefully secure the wedges by tapping from above with a hammer.

# Original Working Instructions

## Usage Instructions

---

### Assembly Information

Internal Diameter of Precast Manhole Ring	Manhole Ring Wall Thickness	Description Panels Required to Form Shutter			Internal Diameter of Manhole Shutter	Theoretical Thickness of Concrete Surround
		A	B	C		
675mm	60mm	2	1	-	1171mm	188mm
900mm	70mm	2	2	-	1368mm	164mm
1050mm	80mm	3	-	1	1541mm	165mm
1200mm	90mm	3	1	1	1738mm	179mm
1350mm	95mm	3	2	-	1856mm	158mm
1500mm	100mm	4	-	1	2028mm	164mm
1800mm	115mm	4	2	-	2343mm	156mm
2100mm	125mm	5	1	1	2712mm	181mm
2400mm	140mm	6	-	1	3002mm	161mm
2700mm	175mm	6	2	1	3396mm	173mm

# Original Working Instructions

## Usage Instructions

---

### Usage Instructions

1. Once the Manhole Shutters have been assembled to the required size, it is now ready to use.
2. Attach the Manhole Shutters lifting points to the lifting equipment's lifting hooks, using a certified lifting chain sling. Always ensure that the hook's gate is correctly closed and the lifting eye is seated correctly in the hook.
3. Check that personnel are clear from the immediate area and the future location to allow for swing of the shutters when lifting off the ground.
4. Carefully raise the shutters just off the ground and check for balance.
5. Carefully transport the shutters to its required destination.
6. Position the shutters over the manhole box and the stacked precast concrete manhole rings, and lower into the excavated trench, so that it surrounds the manhole rings.
7. Once in position, release the Manhole Shutters from the lifting equipment.
8. The concrete surround can now be cast around the precast manhole rings, within the shutters, by pouring concrete into the gap between the two.
9. If a greater pour height is required, this will need to be done in stages- the concrete will need to be poured, set and the excavation backfilled to the new height, before casting the next level.

### Extraction

1. Once the concrete surround has set, the Manhole Shutters can be removed from the trench.
2. Simply reverse the installation process, start by attaching the lifting points to the lifting equipment's lifting hooks, using a certified lifting chain sling.
3. Carefully raise the shutters directly vertically from the concrete cast, taking care not to swing the shutters as it comes free from the mould.
4. Return to position and release from the lifting equipment.

# Original Working Instructions

## Safety Instructions

---

### Basic Safety

A site-specific Risk Assessment, and lift plan where applicable, must be completed by the responsible person before using this equipment to control risks, produce a safe system of work and ensure safety for you, your colleagues and others. Your risk assessment will determine the correct Personal Protective Equipment (PPE) for the task you are doing. You must use it. Conquip recommends that you should wear:

- Suitable clothing
- Gloves
- Hard hat
- Protective footwear (steel toecaps)
- Safety glasses



### Important Safety Notes

- Read these instructions before using this equipment. If there is anything you do not understand or if you have any concerns do not use this equipment. Contact your supervisor or Conquip Engineering Group for advice.
- You must check that you have considered all the safety requirements for the task you are doing and that this equipment is suitable.
- You must protect bystanders and the general public by preventing access to the working area.
- Do not use this equipment if you are tired, unwell or under the influence of alcohol or drugs. If you are taking any medicine or undergoing treatment you should inform your supervisor.

## Usage & Transportation

- Never unevenly load this equipment.
- The weight of the equipment, together with its attachments, must be added to the weight of the load when calculating the total load that will be imposed on the lifting apparatus / operating machine.
- This equipment must be used in conjunction with the load ratings of the lifting apparatus / operating machine. (Refer to the manufacturers' load ratings and original working instructions).
- Make sure you know how to use this equipment and understand all aspects of its operation in case of emergency.
- This equipment weighs more than 25kg. Do not lift or manhandle without machine assistance.
- Do not operate this equipment near overhead power lines.
- Take care in confined spaces, near ceilings or similar hazards. This equipment was designed for vertical lifting. Do not drag, or swing.
- Before operating this equipment, check that you have enough space for you to work safely and make sure that the working area is clear of hazards, obstructions and personnel.
- Before lowering equipment make sure that the landing zone is clear and capable of accepting the size and weight of the load.
- Crush Risk. Keep hands and feet clear of the equipment at all times to avoid injury.
- Do not exceed the maximum Working Load Limit (WLL) shown on the serial plate. Ensure that the WLL on the individual lift points is not exceeded.

## Personnel

- All personnel must wear relevant personal protective equipment.
- Do not wear loose clothing or jewellery and tie back long hair to avoid becoming tangled or trapped in this equipment. You must make everyone in the work area aware of what you are doing.
- All personnel involved in the lifting operation must be competent to do so and must have been briefed in conjunction with this User Guide available from Conquip Engineering Group, the manufacturer.

## Equipment Maintenance & Cleaning

- It is mandatory that the equipment is thoroughly examined regularly, by a qualified engineer, to ensure compliance with relevant regulation/s. (Conquip recommend to carry out thorough examination every six months).
- This product may incorporate various loose and detachable items of lifting gear. Refer to the separate requirements for the safe use of those items.
- When not being used, store the unit in a clean, upright condition and in a safe place where it will be protected from thieves and unauthorised users.
- This equipment must be inspected by the responsible person before each use and then regularly, as determined by your risk assessment or working practice. If you have any concerns about condition or suitability do not use.



# Disclaimer

---

## Warranty

The products supplied by Conquip Engineering Group are all guaranteed by a 12 month warranty.

Apart from where exceptions apply, Conquip Engineering Group promises to repair or replace any fault which the Company considers to be due to defective material or workmanship within 12 months of the date of sale, at no additional cost.

- Faults arising from unauthorised alterations (see modifications section below for full details).
- Damage caused by abuse, neglect, misuse or falling.
- Damage caused because of failure to follow transportation, storage, loading, cleaning or operating instructions.
- Replacement or repair of components due to fair wear and tear.
- Any consequential damage or wear arising from the use or fitting of additional or non-standard parts.

## Modifications

If any third-party modifications or alterations, involving drilling, welding, cutting or distortion of materials in any form, are to be carried out on the product, Conquip Engineering Group must provide full written approval prior to the work being carried out.

Alterations, modifications, additions or repairs must be carried out by Conquip Engineering Group's recognised distributors, if they are not carrying out the work themselves.

Conquip Engineering Group operate a continuous improvement policy and therefore reserve the right to alter technical specifications and user guide details at any point without notice.

Conquip Engineering Group will not cover or reimburse any transportation and/or shipment costs to and from their premises or their recognised agents, or any material and/or labour costs for repair, replacement or assessment against a warranty claim.

Conquip Engineering Group and/or their directors, employees, insurers or recognised agents will not be held liable for consequential damages, losses or expenses relating to the inability to use the product correctly for its purpose.

## Important Notes

- This User Guide is for this Conquip product only.
- Any movements of the product must be thoroughly planned before the work commences to identify potential hazards and assess risk.
- All personnel involved in lifting and transportation of this product must have read this User Guide and must be properly briefed.
- You must be competent, alert and medically fit when using this equipment. If you have a medical condition, a mental or physical disability, you must seek advice from a medical professional before using this equipment.

Talking to us is easy

**We're here to help**

Call us on 0800 116 076

Email us at [sales@conquipgroup.co.nz](mailto:sales@conquipgroup.co.nz)

[www.conquipgroup.co.nz](http://www.conquipgroup.co.nz)