



WESTPORT
EQUIPMENT

Technical User Guide



LIGHTWEIGHT STEEL MANHOLE BOXES USER GUIDE & SAFETY INFORMATION

Scaffolding | Shoring | Safety

IMPORTANT NOTE

This User Guide is intended for use of the Westport Equipment Ltd Lightweight Steel Manhole Boxes ONLY.

All excavation works which the Lightweight Steel Manhole Boxes will be used to access must be signed off by a suitably qualified persons and the contractor & are not covered by this guide. Suitable Lift Plans, Risk Assessments & Safe Systems of Work should be implemented by the contractor prior to the commencement of works to ensure the Westport Equipment Ltd Lightweight Steel Manhole Boxes is a suitable access system. This User Guide is intended as guidance for the Westport Equipment Ltd Lightweight Steel Manhole Boxes.

Any non-standard applications of the Westport Equipment Ltd Lightweight Steel Manhole Boxes are not covered by this guide and must be approved by a suitably qualified person. Suitable PPE should be worn at all times when assembling, operating & disassembling the Westport Equipment Ltd Lightweight Steel Manhole Boxes.

Ensure all personnel engaged in the installation, operation & use of the Westport Equipment Ltd Lightweight Steel Manhole Boxes are properly briefed, have read & understood this guide, are working under a suitable set of RAMS and are supervised by a competent person.

HEALTH & SAFETY

PERSONAL PROTECTION EQUIPMENT (PPE)	
	WEAR SUITABLE PROTECTIVE GLOVES
	WEAR SUITABLE HEAD PROTECTION
	WEAR SUITABLE PROTECTIVE FOOTWEAR
	USE SUITABLE EYE PROTECTION
	USE SUITABLE HEARING PROTECTION

HAZARDS	
	GENERAL CAUTION/WARNING (E.G. DEEP EXCAVATION)
	RISK OF CRUSHED HANDS

REV 1.0; FEB 2026
Liam Brew

Westport Equipment Ltd, Barstown Commercial Park Dunboyne,
Co. Meath, A86 N882 Ireland. +353 1 223500

THE INFORMATION CONTAINED WITHIN THIS GUIDE REMAINS THE PROPERTY OF WESTPORT EQUIPMENT LTD AND IS NOT TO BE ALTERED OR REPRODUCED WITHOUT WRITTEN PERMISSION. WESTPORT EQUIPMENT LTD RESERVES THE RIGHT TO CHANGE ANY DATA WITHOUT GIVING PRIOR NOTICE. ONCE PRINTED – UNCONTROLLED.

INTRODUCTION

The Lightweight Steel Manhole Boxes is designed for ground pressures up to 20 kN/m². If in doubt about the generated ground pressure in the excavation consult a qualified soil engineer.

Unloading (Method to be determined by Risk Assessment on Site)

DISASSEMBLED

By forklift/telehandler:

Ensure the forklift/telehandler has sufficient capacity and adequate fork length to lift the equipment safely. (See capacity table).

Ensure that each lift occurs at the centre of gravity. Lift only one item at a time.

By crane/excavator:

Ensure the crane/excavator has sufficient capacity and adequate chains to lift the equipment safely. (See capacity table). Use good slinging practice at all times. Ensure the chain(s) are connected to the four lifting points on the panel (two beneath the driving caps on each side of the panel and two on the bottom of the panel). Lift only one item at a time.



Storage/Stacking (To be determined by Risk Assessment on Site)

Lightweight Steel Manhole Boxes articulate to allow easy installation, this may cause them to fall over when stored or stacked. Therefore, never stack one Lightweight Steel Manhole Boxes on top of another. Lightweight Steel Manhole Boxes maybe stored by standing upright in a shallow trench or supported between one metre cube concrete blocks.

In all cases risk assessment should be undertaken to ensure site safety.

REV 1.0; FEB 2026
Liam Brew

Westport Equipment Ltd, Barstown Commercial Park Dunboyne,
Co. Meath, A86 N882 Ireland. +353 1 223500

THE INFORMATION CONTAINED WITHIN THIS GUIDE REMAINS THE PROPERTY OF WESTPORT EQUIPMENT LTD AND IS NOT TO BE ALTERED OR REPRODUCED WITHOUT WRITTEN PERMISSION. WESTPORT EQUIPMENT LTD RESERVES THE RIGHT TO CHANGE ANY DATA WITHOUT GIVING PRIOR NOTICE. ONCE PRINTED – UNCONTROLLED.

INSTALLATION

THE METHOD OF INSTALLATION SHOULD BE DETERMINED BY RISK ASSESSMENT.

PICK AND PLACE

This method of installation does not support the side walls of the excavation, therefore the Lightweight Steel Manhole Boxes is used as a safety shield. It may be inappropriate to use in certain ground conditions where there is risk of movement, where reinstatement is critical or if the excavation is subject to surcharge.

1. Excavate the trench to the required width and depth. Do not over dig.
2. Lift the Lightweight Steel Manhole Boxes into position. Ensure enough of the Lightweight Steel Manhole Boxes remains above the trench to prevent any ground falling into the excavation. If this requires a top box fit it to the base box prior to installation, ensure base box is adequately supported or bench the excavation to allow the top box to be attached in safety then dig out the benching and push box down into position.
3. When the dig depth has been reached close the open side of the Lightweight Steel Manhole Boxes by placing a road plate or similar against the wings.

DO NOT SIDE LOAD THE MANHOLE BOX STRUTS IT MAY CAUSE FAILURE.

4. Do not enter excavation until installation is complete and declared safe.

REV 1.0; FEB 2026
Liam Brew

Westport Equipment Ltd, Barstown Commercial Park Dunboyne,
Co. Meath, A86 N882 Ireland. +353 1 223500

THE INFORMATION CONTAINED WITHIN THIS GUIDE REMAINS THE PROPERTY OF WESTPORT EQUIPMENT LTD AND IS NOT TO BE ALTERED OR REPRODUCED WITHOUT WRITTEN PERMISSION. WESTPORT EQUIPMENT LTD RESERVES THE RIGHT TO CHANGE ANY DATA WITHOUT GIVING PRIOR NOTICE. ONCE PRINTED – UNCONTROLLED.

INSTALLATION CONTINUED

DIG AND PUSH

This method of installation supports the side walls of the excavation and should be the preferred method of installation.

1. Dig a starter hole approximately 1.0 metre deep and long enough to accept the Lightweight Steel Manhole Boxes. Lift the Lightweight Steel Manhole Boxes into the hole. Ensure the panels remain vertical.
2. Push the back of the excavator onto the driving caps of each panel to push the panel into the ground. Push each panel in turn until it reaches the limit of its movement.
3. Then excavate beneath the panel and push down again. Repeat the process until the required depth is achieved. Ensure enough of the Lightweight Steel Manhole Boxes remains above the trench to prevent any ground falling into the trench. (See "How to add a top box")
4. Only push on the driving caps, pushing elsewhere on the panel may cause severe damage to the panel and the bucket.
5. When the dig depth has been reached close the open side of the Lightweight Steel Manhole Boxes by placing a road plate or similar against the wings.

DO NOT SIDE LOAD THE MANHOLE BOX STRUTS IT MAY CAUSE FAILURE.

6. Do not enter the excavation until installation is complete and declared safe.

REV 1.0; FEB 2026
Liam Brew

Westport Equipment Ltd, Barstown Commercial Park Dunboyne,
Co. Meath, A86 N882 Ireland. +353 1 223500

THE INFORMATION CONTAINED WITHIN THIS GUIDE REMAINS THE PROPERTY OF WESTPORT EQUIPMENT LTD AND IS NOT TO BE ALTERED OR REPRODUCED WITHOUT WRITTEN PERMISSION. WESTPORT EQUIPMENT LTD RESERVES THE RIGHT TO CHANGE ANY DATA WITHOUT GIVING PRIOR NOTICE. ONCE PRINTED – UNCONTROLLED.

INSTALLATION CONTINUED

COMPACTION

Over time the walls of the excavation may close in on the Lightweight Steel Manhole Boxes, it is therefore recommended to ease the Lightweight Steel Manhole Boxes by slightly lifting it prior to compaction to prevent compaction causing the Lightweight Steel Manhole Boxes becoming stuck.

Never compact more than one third up the face of the Lightweight Steel Manhole Boxes then raise it before continuing. Always be aware that compaction may damage the inner faces of the Lightweight Steel Manhole Boxes.

EXTRACTION

The method of extraction should be determined by Risk Assessment.

Due to consolidation, it may be more difficult to extract the Lightweight Steel Manhole Boxes than installing it. Use only the extraction/lifting points located on the underside of the driving cap. Ensure that the chain sling is strong enough to undertake this operation. Be aware that chains may snap if improperly used and cause severe injury, therefore never allow personnel in the vicinity of the lift.

Methods of extraction (listed in increasing difficulty of extraction):

1. Straight pull:

Attach the chain sling to the two extraction/lifting points on each panel and lift the Lightweight Steel Manhole Boxes using four legs of the chain sling.

2. Half pull:

Attach the chain sling to the two extraction /lifting points on one panel only and lift that panel. When it has reached its maximum movement remove the chain sling and connect it to the other panel and lift. Repeat the procedure until the Lightweight Steel Manhole Boxes is extracted.

3. Single pull:

Attach a single leg of chain sling to an extraction/lifting point and raise the corner of each panel in turn, when the Lightweight Steel Manhole Boxes moves freely remove the Lightweight Steel Manhole Boxes by method 1.0).

Other Hazards:

Never use bent or damaged struts or panels.

Never attempt remove/adjust struts whilst the trench box is in the excavation.

Never attempt to lift the Lightweight Steel Manhole Boxes using the struts.

Never climb in or out of the trench using the struts. Always use a ladder.

Never move a Lightweight Steel Manhole Boxes with personnel inside.

Never enter an unsupported part of the trench.

Never apply side loads to struts.

Never exceed the load capacity of the Lightweight Steel Manhole Boxes.

REV 1.0; FEB 2026
Liam Brew

Westport Equipment Ltd, Barstown Commercial Park Dunboyne,
Co. Meath, A86 N882 Ireland. +353 1 223500

THE INFORMATION CONTAINED WITHIN THIS GUIDE REMAINS THE PROPERTY OF WESTPORT EQUIPMENT LTD AND IS NOT TO BE ALTERED OR REPRODUCED WITHOUT WRITTEN PERMISSION. WESTPORT EQUIPMENT LTD RESERVES THE RIGHT TO CHANGE ANY DATA WITHOUT GIVING PRIOR NOTICE. ONCE PRINTED – UNCONTROLLED.

CAPACITY TABLE (ALL WEIGHTS APPROX):

Part Ref	Description	Weight (kg)
222020	2m Lightweight Steel Manhole Boxes Lower Panel	395
222010	2m Lightweight Steel Manhole Boxes Upper Panel	250
255016	Fixed Strut x 2.0m Internal (904mm)	11
255017C2	2.5m Lightweight Steel Manhole Boxes Lower Panel	450
255080C2	2.5m Lightweight Steel Manhole Boxes Upper Panel	274
255018	Fixed Strut x 2.5m Internal (1404mm).	15.5



Always practice good site safety practice.



REV 1.0; FEB 2026
Liam Brew

Westport Equipment Ltd, Barstown Commercial Park Dunboyne,
Co. Meath, A86 N882 Ireland. +353 1 223500

THE INFORMATION CONTAINED WITHIN THIS GUIDE REMAINS THE PROPERTY OF WESTPORT EQUIPMENT LTD AND IS NOT TO BE ALTERED OR REPRODUCED WITHOUT WRITTEN PERMISSION. WESTPORT EQUIPMENT LTD RESERVES THE RIGHT TO CHANGE ANY DATA WITHOUT GIVING PRIOR NOTICE. ONCE PRINTED – UNCONTROLLED.