



TRENCHING & SHORING

2.5m Aluminium Manhole Box Technical Data Sheet

This technical data sheet provides essential information for users of the GAP Group 2.5m Aluminium Manhole Box System. It highlights key aspects of manhole box assembly, installation, weight, dimensions, planning, and lifting operations that should be considered when compiling method statements.

Overview

The 2.5m Aluminium Manhole Box is a four-sided mechanical excavation support system designed for trenches up to **1.85 meters deep**. It is specifically engineered to support safe manhole construction and is not intended for other purposes.

System Features

- **Depth Capacity:** Up to 1.85 meters (achievable with a single panel).
- **Maximum Lateral Earth Pressure:** 32 kN/m².
- **Application:** Designed for use with GAP's manhole shutters, facilitating rapid manhole construction without requiring workers to enter unsupported excavations.
- **Installation Methods:** Designed to be installed using a dig and place approach with an excavator.

Weight & Dimensions

- **Complete Base Box:**
 - Weight: 350kg
 - Components: 2 panels, 4 struts, pins and R-clips

Planning & Safety Considerations

When planning for the use of the 2.5m Aluminium Manhole Box, consider the following:

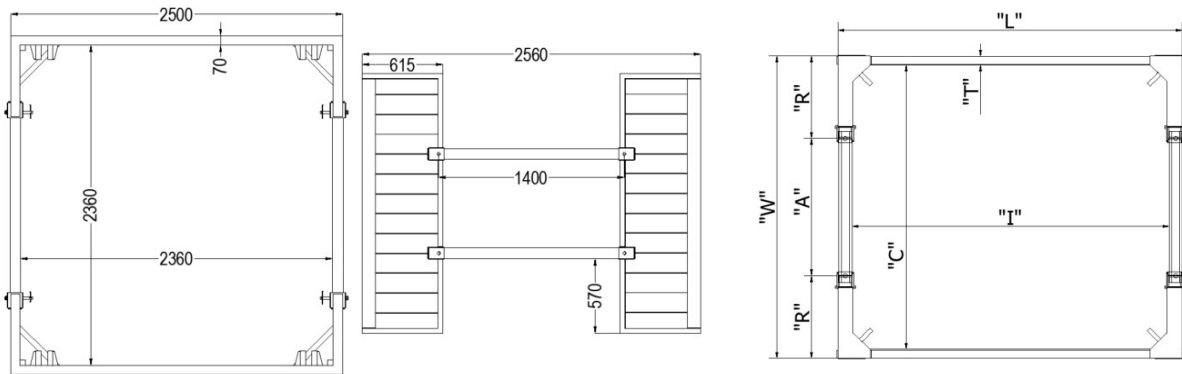
- **Lifting Operations:** Ensure that the excavator's lifting capacity is sufficient to handle the manhole box components.
- **Assembly & Installation:** Follow safe practices and procedures for assembling and installing the manhole box, as outlined in your method statement.
- **Site Conditions:** Assess site conditions such as soil type, trench depth, and groundwater levels before installation.

Important Notes

- The maximum depth of 1.85 meters is achievable with only one panel.
- It is assumed that users are familiar with general safety practices relevant to manhole box operations.

For further information or assistance, please contact GAP Group.

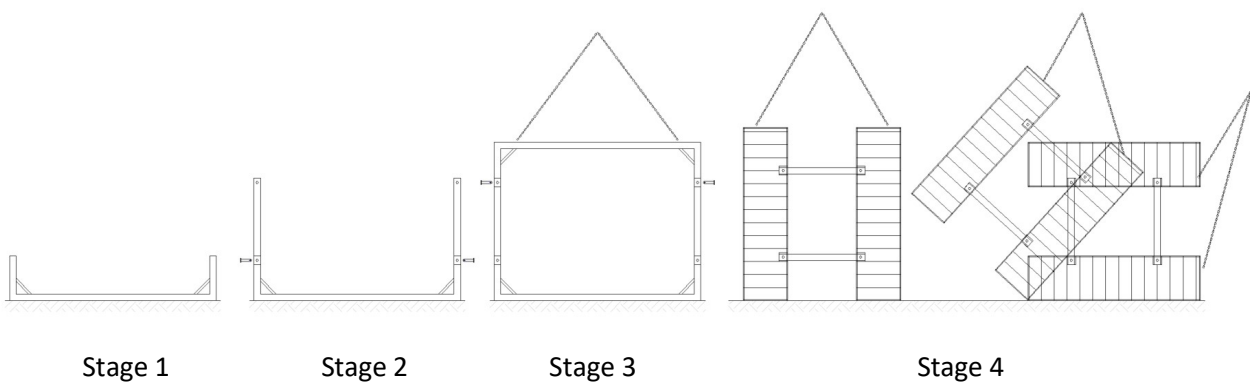
Box Component Identification, Range and Dimensions



Pin and Struts

Strut Type	"A" Pin to Pin Length (mm)	"R" Outside Face to Pin Centre (mm)	"C" Internal Clearance (mm)	"I" Internal Clearance (mm)	"W" Overall Width (mm)	Clearance Below Lower Strut (mm)	"L" Overall length of the Box (mm)
Size 1	1400	580	2360	2360	2560	570	2500

Site Assembly:



Aluminium Manhole Box Assembly and Installation Procedure

Stage 1: Prepare the Base Panel

- Place one of the base panels on the ground with the strut connector points facing upwards.

Stage 2: Attach Struts to the Base Panel

- Attach the assembled struts to the base panel using pins and R-clips, ensuring they are securely connected.

Stage 3: Complete the Base Assembly

- Attach the second base panel to the other end of the struts using pins and R-clips to complete the base box assembly.

Stage 4: Position the Base Box Upright

- Using 4 chains, lift and stand the box onto its cutting edge by securing the chains to the upper lifting eye points.

Note: For disassembly and removal, follow the procedure in reverse order.