

Aluminium Trench Shield Technical Data Sheet

This technical data sheet is intended to provide basic information for users of the GAP Group Aluminium Trench Shield System and draw the client's attention to the aspects of Trench Box Assembly, weight, dimensions, planning and lifting operations which need to be considered in compiling method statements.

Overview

The Aluminium Trench Shield is a two-sided mechanical excavation support system designed for trenches up to **2.4 meters deep**. It is specifically engineered for use with small excavators that have limited lifting capacities. The trench box is not intended for any other purposes.

System Features

- **Depth Capacity:** Up to 2.4 meters (with 2 bases).
- Maximum Lateral Earth Pressure: 20 kN/m².

Weight & Dimensions

- Complete Base Box:
 - o Weight: 130 kg
 - o Components: 2 panels, 4 struts, pins and R-clips

Planning & Safety Considerations

When planning for the use of the Aluminium Trench Shield, consider the following:

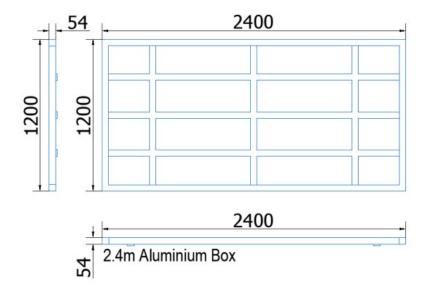
- **Lifting Operations:** Ensure that the excavator's lifting capacity is sufficient to handle the Aluminium Trench Shield components.
- **Assembly & Installation:** Follow safe practices and procedures for assembling and installing the Trench Shield, as outlined in your method statement.
- **Site Conditions:**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

Important Notes

- The maximum depth of 2.4 meters is achievable with two bases one on top of another.
- It is assumed that users are familiar with general safety practices relevant to Trench Shield operations.

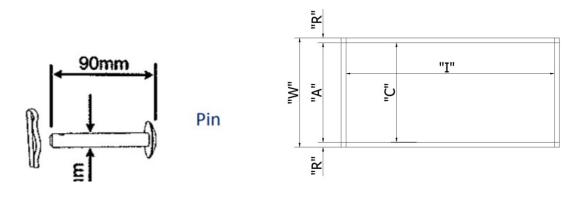
^{*}Note: Max depth achievable using 2 x Panels.

Box Component Identification, Range and Dimensions



Pin and Struts

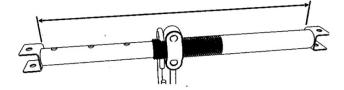
There are 4No. Pins requried to attach one extension with the base panel.



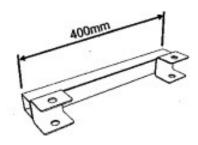
Strut Type	"A" Pin to Pin Length (mm)		"R" Outside Face to Pin	"C" Internal Clearance (mm)		"I" Internal Clearance (mm)	"W" Overall Width (mm)		Clearance Below Lower
	Min	Max	Centre (mm)	Min	Max	(cont.)	Min	Max	Strut (mm)
Size 1	520	760	54	520	760	2150	630	870	290
Size 2	760	1180	54	760	1180	2150	870	1290	290
Size 3	1100	1800	54	1100	1800	2150	1210	1910	290

Struts:

Adjustable Struts



Extension Joiner – Connector



All conections are via the 12mm diameter by 90mm long pin and secured with 'R' clip.

