

## **Backhoe Trench Box Technical Data Sheet**

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

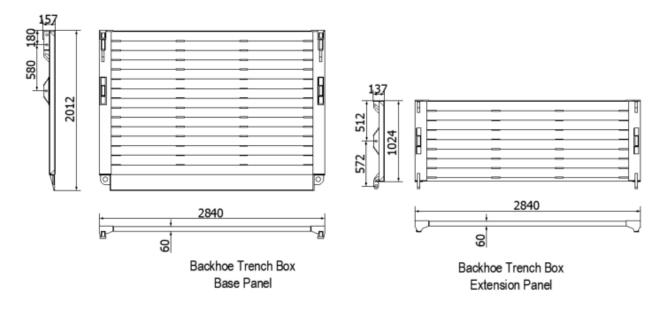
It is assumed that clients are familiar with general safe practices applicable to this type of work. The Backhoe Trench Box is a two-sided mechanical excavation support system for support of trenches up to **\*2.9m deep**. It is not intended for other purposes.

GAP's Backhoe Trench box is designed for use with small excavators that have a limited lifting capacity. This box can be used in conjunction with Backhoe Manhole boxes to connect two manholes. These boxes are designed to be installed by an excavator using either dig and push or excavate and lower in place technique. This box can resist a maximum lateral earth pressure of **20kN/m<sup>2</sup>**.

A complete Base Box weighs **805kg** (2 panels, 4No. struts and pins). A complete Extension Box weighs **415kg** (2 panels, 2No. struts and pins).

\*Note: Max depth achievable using a base and 1no. extension.

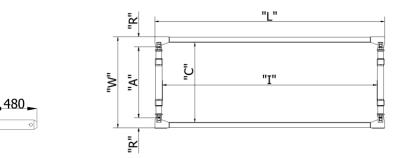
## Box Component Identification, Range and Dimensions



## **Pin and Struts**

5

There are 4No. Pins required to attach one extension box with the base box.

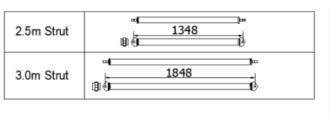


"A"		<i>"</i>		"C" Internal Clearance (mm)		"l" Internal Clearance (mm)	"W" Overall Width (mm)		Clearance Below Lower Strut	"L"
Strut Type	Pin to Pin Length (mm)									Overall Length (mm)
	Min	Max	(mm)	Min	Max		Min	Max	(mm)	
Size 1	503	703	110	603	803	2298	723	923	1200	2840
Size 2	703	903	110	803	1003	2298	923	1123	1200	2840
Size 3	903	1103	110	1003	1203	2298	1123	1323	1200	2840
Size 4	1103	1303	110	1203	1403	2298	1323	1523	1200	2840
Size 5	1303	1503	110	1403	1603	2298	1523	1723	1200	2840
Size 6	1503	1703	110	1603	1803	2298	1723	1923	1200	2840
Size 7	1703	1903	110	1803	2003	2298	2123	2323	1200	2840
Size 8	1903	2103	110	2003	2203	2298	2323	2523	1200	2840
Size 9	2103	2303	110	2203	2403	2298	2523	2723	1200	2840
*2.5m	1348		110	1448		2298	1568		1200	2840
*3.0m	1848		110	1948		2298	2068		1200	2840
*2.5m and 3.0m Struts are Fixed Struts.										

Struts: There are two types of struts for Backhoe manhole and Trench boxes.

1. Fixed Struts

## 2. Adjustable Struts



Inner Strut End	<u>237 () 000 + m</u> m m
Size 1 Spacer	- <u>384</u>
Size 2 Spacer	<u>584</u> 90 9
Size 3 Spacer	90 9 9
Size 4 Spacer	
Size 5 Spacer	
Size 6 Spacer	
Size 7 Spacer	90 9 9 9
Size 8 Spacer	<u>1784</u> 90 0 0 0
Size 9 Spacer	