



**TRENCHING & SHORING**

### 3.0m Standard Manhole Box Technical Data Sheet

This technical data sheet is intended to provide basic information for users of the GAP Group 3.0m Standard Manhole Box System and draw the client's attention to the aspects of Manhole 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 Manhole Box is a four-sided mechanical excavation support system for support of trenches up to **\*5.5m deep**. It is not intended for other purposes.

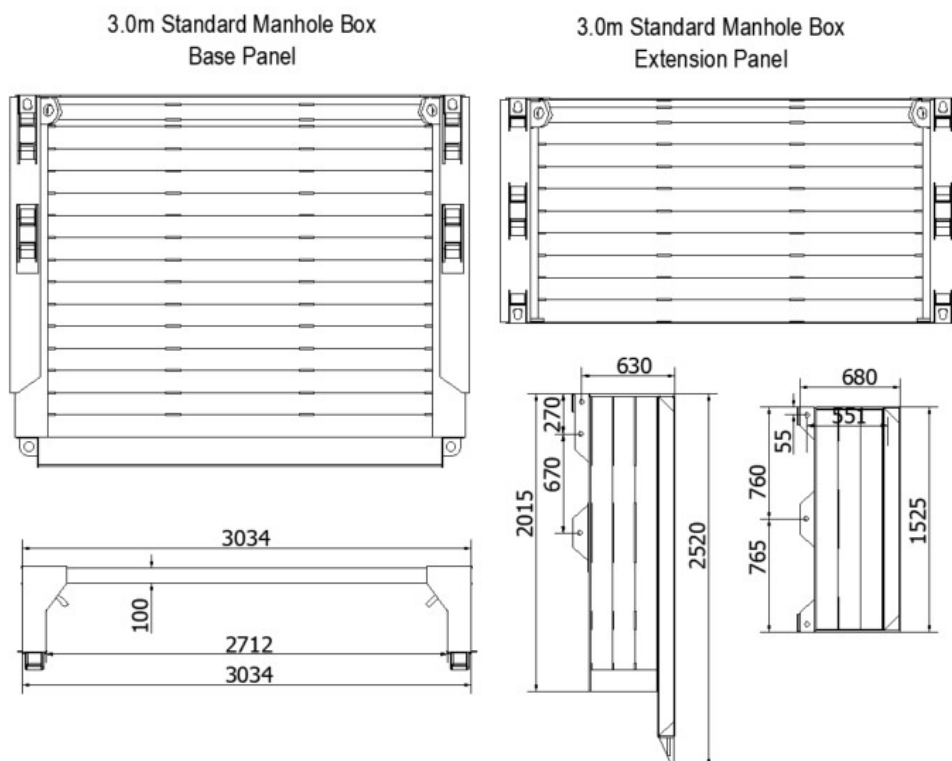
The 3.0m Standard Manhole box is suitable for Manhole ring sizes of **1350, 1500 and 1800mm**.

GAP's 3.0m Standard Manhole box is designed for use in conjunction with our manhole shutters, allowing fast manhole construction without the need for a worker to enter an unsupported excavation. 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 **45kN/m<sup>2</sup>**.

Each Base Panel weighs **1278kg** and each Extension Panel weighs **910kg**.

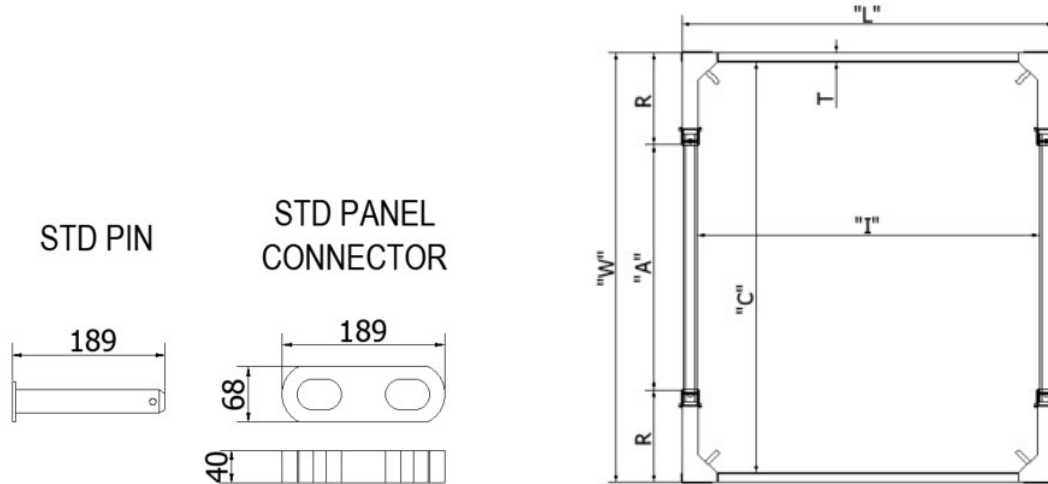
\*Note: Max depth achievable using a base and 2no. extensions.

#### Box Component Identification, Range and Dimensions



## Pin and Struts

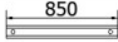
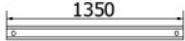

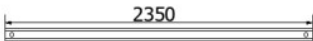



There are 8No. pins and 4No. connectors required to attach one base box to the extension box.



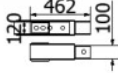

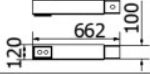
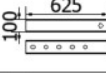
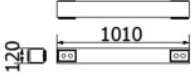
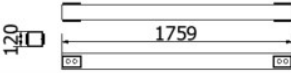
Strut Type	"A" Pin to Pin Length (mm)		"R" Outside Face to Pin Centre (mm)	"C" Internal Clearance (mm)		"I" Internal Clearance (mm)	"W" Overall Width (mm)		Clearance Below Lower Strut (mm)	"L" Overall Length (mm)
	Min	Max		Min	Max		Min	Max		
	Size 0	480		680	630		1550	1750		
Size 1	690	1090	630	1750	2150	2712	1950	2350	1500	3034
Size A	1160	1960	630	2220	3020	2712	2420	3220	1500	3034
Size B	1910	2710	630	2970	3770	2712	3170	3970	1500	3034
Size C	2660	3460	630	3720	4520	2712	3920	4720	1500	3034
*2.0m	746		630	1816		2712	2016		1500	3034
*2.5m	1246		630	2316		2712	2516		1500	3034
*3.0m	1746		630	2816		2712	3016		1500	3034
*3.5m	2246		630	3316		2712	3516		1500	3034
<b>*2.0m, 2.5m, 3.0m and 3.5m Struts are Fixed Struts.</b>										

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

**Fixed Standard Struts Manhole Box**

2.0m STRUT	
2.5m STRUT	
3.0m STRUT	
3.5m STRUT	
4.0m STRUT	
4.5m STRUT	
4.7m STRUT	

**Adjustable Standard Struts Manhole Box**

SIZE 0 OUTER STRUT	
SIZE 0 INNER STRUT	
SIZE 1 OUTER STRUT	
SIZE 1 INNER STRUT	
A DOUBLE ENDED OUTER STRUT	
B DOUBLE ENDED OUTER STRUT	
C DOUBLE ENDED OUTER STRUT	