Safe Use/Installation Instructions
Blank Inflatable Stoppers

This describes the correct and safe method of use of blank inflatable stoppers

Stopper Type	Diameter/Size	Height	Accessories Available
Blank Inflatable Stopper	200/500	600mm	Compressor Controller 1.0mtr Hose 10.0mtr Hose 110v Compressor Hand Pump Controller Hand Pump with Gauge

The Method of Installation described is only a suggestion, the ultimate safety and responsibility of installation is with the company/responsible person installing it.

- Purpose – Pipeline Blocking/Holding Back
- Inflation Pressure: 3.0 bar
- Wide Expansion Range, will work in all types of pipe
- Lightweight – Most sizes can be installed by one person
- Reinforced Synthetic Rubber for maximum durability
- Available from stock
- Wire Rope Safety Fixing Eyes
- All inflatable pipe stoppers must be mechanically braced against slippage
- Over Inflation Protector

The blank inflatable stoppers will come supplied with an inflation kit of your choice, whether it be a compressor controller, or hand pump controller kit.

The stoppers will have been tested before they were supplied to you.

The blank inflatable stoppers come with two different fixing eyes, one in the middle, and two either side of the female hose quick release coupling. These are for safety only – you must strut the stopper!!

Part One
Connecting the Compressor Controller and Hose.

(1) Always ensure the compressor you are using is turned off and has no pressure in the hose.

(2) Firstly connect the pipe stopper to the 10mtr length of green hose you have been supplied with the inflation kit (male end). The female end is on the top side of the stopper in the middle.

(3) Then connect the other (female end) to the compressor controller.

(4) Finally connect the compressor controller to the air hose that leads from the compressor (claw attachment). We can supply, hire/sell you a 110v compressor that we keep in stock if you require.

It is highly dangerous to do any air connections if the hoses are live.

You are now ready to install the stopper.

Part Two

Inserting the Pipestopper.

Before you enter any confined space, you must be trained, authorised and competent, and have the correct gas detection and rescue equipment, and must always use a lifeline.

When you insert the stopper into the pipe it is very important that you ensure there is no debris in the pipe, whether it be chippings, some kind of fill you have used, or mud/clay.
Anything remotely sharp in the pipe when you inflate it will puncture the stopper, and result in a delay in your proceedings, and a nice repair or replacement charge.

Method One

Floating Method

(1) You would normally use this method to stop the flow in an existing pipe, without having to go into a live flowing system.

(2) It would be normal practice to flow the blank inflatable stopper down the pipe from the previous manhole. Always ensure you have a long enough hose and safety wire rope line attached properly and securely before you put the stopper in the line. It is always a good idea to measure the pipe to where you are going to inflate the stopper, and mark the safety wire rope to make sure you get it in exactly the right place. Now float it, inflate it, and tie off the wire safety rope.
The flow is now stopped, and you can strut the stopper.

(2) Once you have inserted the stopper you must ensure you strut it. The strutting must be in place to stop the stopper moving when you are working on the pipe or manhole, and to stop it blowing out when you deflate it, which would mean losing it down the pipe.

Method Two

Blanking Method

(1) This method would normally be used in new pipeline construction, to stop any foreign bodies from entering the new pipe and manholes, and would also ensure nothing can come down the pipeline when it is being worked on.
Whatever the case here, the stopper must always be strutted.

Stopper Inflation

(1) Ensure the pressure release valve is closed on the inflation controller before you inflate.
It is not possible to over inflate the stopper, as the valve on the controller will close when it reaches the correct operating pressure.

(2) We always recommend keeping the airline to the inflatable stopper connected at all times. This will allow you to inflate and deflate the stopper at any time. Clockwise to close, and anti-clockwise to open.

Stopper Deflation and Removal

When you have completed your works on the manhole chamber or pipe, you are ready to deflate the stopper.

(1) To deflate the stopper – turn the release valve on the controller anti-clockwise, leaving the strutting in place, and wait until it is fully deflated.
(2) Once the stopper is fully deflated, and moveable, remove the strutting from around the stopper and remove it. Slowly release the wire safety rope holding the stopper, and gently ease it down the line to where it can be safely retrieved.
(3) For the sake of health and safety and personal hygiene, please ensure the stopper and everything that was live in the pipeline/manhole is sanitised, and returned in a clean and tidy condition, as a charge will apply if it is not!!
(4) All the stoppers are tested and inspected on their immediate return to our depots.

We have included some safety information for working in and around manholes and excavations.

Current Safety Legislation

We recommend that users that get into any supported excavation and confined spaces, spend a few moments familiarising themselves with the following references and publications:

(i) HSE – Safety in Excavations – CIS8REV1
(ii) HSE – Health and Safety in Excavations - Be Safe and Shore – HSG 185
(iii) BS8002 (1994) – Earth Retaining Structures
(iv) CIRIA SP95 – The Design and Construction of Sheet Piled Cofferdams
(v) CIRIA Report 97 – Trenching Practice
(vi) HSE – Working in Confined Spaces (Gas Detection and Rescue Equipment)
(vii) HSE – Working at Height Regulations

Current Safety Legislation requires that the product users formulate a safe system of work to undertake the Excavation, which may include a Temporary Works Design. It also requires the main contractor to ensure the employees, or contractors going into confined spaces are suitably trained and certificated, are fully aware of the risks, and have suitable methods of escape in an emergency situation. This information is intended to provide general guidance only. If ever there is a doubt about whether you need any form of trench support, or confined space equipment and training or not, remember this:

Four very experienced groundworkers were laying foul drains across a greenfield site. The trench was 4.5mtr deep and 2.2mtr wide, with vertical sides. The contractors were advised to provide shoring but they insisted that the ground, comprising of mudstone, was self-supporting and showed no sign of movement. The following day the trench side collapsed catastrophically, killing three of the workers and seriously injuring the fourth.
Moral to the story – No matter how much trenching experience you have, never take the ground for granted – don’t become a statistic!

For any further information you require, on technical support or advice on temporary works designs, trench support training and advice, or any advice on confined space training and equipment, contact:

Emyr Jones – Operations Director
Tel (01443) 844713
Fax (01443) 844691
E Mail: Emyr@site-equipment.co.uk
Website: www.site-equipment.co.uk