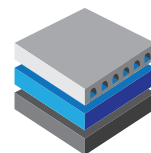


ENVIROCHAMBER

100% Recycled, Lightweight &
Durable One-Piece Manhole
Chambers & Covers



www.pdsenviro.com



PDS

SURFACE WATER MANAGEMENT

WELCOME TO PDS

Envirochamber is the UK's leading plastic underground manhole system with over 2 million units sold to the water industry in the last 5 years.

A REPUTATION BUILT THROUGH INNOVATION



STRONG & ROBUST

Envirochamber **does not break**. The units are made from a recycled material that is more durable than concrete and tested to **D400kN unsupported**. There is no danger of breakage from the logistic and stocking process.



LIGHTWEIGHT

The units are considerably lighter than the concrete equivalents. They can be installed manually and in the majority of instances with one-man manual lift.



DURABLE

Envirochamber is resistant to all forms of effluents including road salts, petrol and diesel. Recycled plastic takes up to 1000 years to degrade.



COST SAVINGS

The product is quicker and easier to install with the major benefit that roads can be re-opened much faster, so reducing costs.



ONE PIECE

The one-piece tooling offers a monolithic unit, without screws or joints that could easily break. This ensures that any load is distributed evenly.



SPEED OF REINSTATEMENT

The Envirochamber can be installed, reinstated and immediately trafficked. This saves both time, and money on expensive traffic management.



GUARANTEE

PDS are so confident of Envirochamber's ability to provide a strong, robust and lasting access solution that we offer a guarantee against breakage - before, during and after installation.



A CHAMBER LIKE NO OTHER

PDS have the largest range of small chambers, and are currently adding larger chambers to allow supply to other industries. The product is strong and robust reducing installation time significantly. We are also able to offer ancillary products that add to the usability of the chamber. The chamber has been designed for all situations.



FULL PRODUCT RANGE

- Sizes currently start as small as 150mm x 150mm x 75mm high stop tap units up to the 900mm x 600mm x 100mm deep access chambers
- A range of marker posts manufactured from the same robust material
- Offset, centre and square hole
- Bases available
- A range of 430mm x 280mm hydrant chamber covers in composite available
- Extended range of composite covers for other sizes also available



BETTER FOR THE ENVIRONMENT

Unlike existing systems - which are brittle, heavy and difficult to recycle - Envirochamber can help to reduce the carbon footprint of your organisation. Envirochamber is manufactured from a recycled plastic composite that would otherwise be destined for landfill in the UK and overseas.

The units are robust and do not break during or after installation. At the end of their lifetime they can even be recycled into new units.

All this reduces the amount of waste sent to landfill in the UK or overseas and helps to meet the increasing recycling demands of the industry.



ACCREDITED, CERTIFIED & APPROVED

- Envirochamber is tested to D400kn - EN124 unsupported
- Chambers comply to BS5834 part 4 2011 (Surface boxes, guards and underground chambers for the purposes of utilities)
- Covers comply to BS 5834 - Part 2 2011 and to ENBS 14598 - 3 - 3 2005 (material selection)
- HA 1 04/11 has also been taken into account during the design and testing of the products
- Achilles approval
- ISO 9001 certification
- ISO 14001 environmental management systems
- Approval from most major water authorities
- Number 1 supplier to the water authorities in the UK

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**ENVIROCHAMBER
OFFERS SIGNIFICANT
ADVANTAGES OVER
TRADITIONAL SYSTEMS
AND MATERIALS**



The USL Group of companies are market leaders in the provision of specialist civil engineering and construction solutions for virtually any type of new build or refurbishment project.

For almost four decades, the business has been at the forefront of cutting edge resin and cementitious technology, combining high performing innovative products, first class operations, expert technical support and unrivaled customer service.

USL Group specialise in expansion joints, structural and liquid waterproofing, construction chemicals, concrete repair systems, injection resins and specialist safety & anti-slip products. With a comprehensive portfolio of products and a highly developed global network, the business is focused on providing specialist construction solutions on a truly global basis.

ENVIROCHAMBER

The 100% recycled durable Envirochamber has had fantastic success in the utilities markets over the last 4 years. Due to the experience of our Directors in the Access Chamber markets, it was apparent that the product range was suitable for numerous other applications where a "hole" in the ground was required.

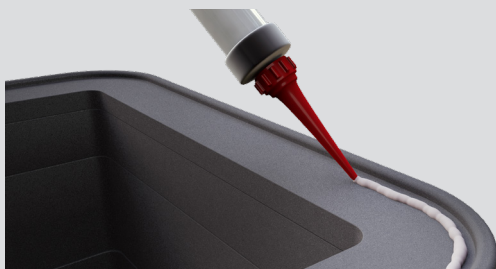


ENVIRO
CHAMBER | 03

ONE-PIECE MANHOLE CHAMBERS

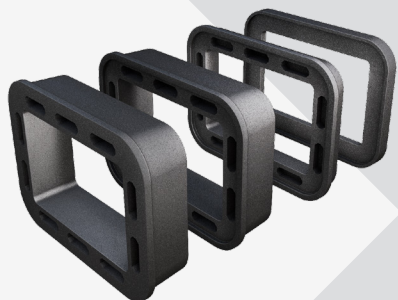
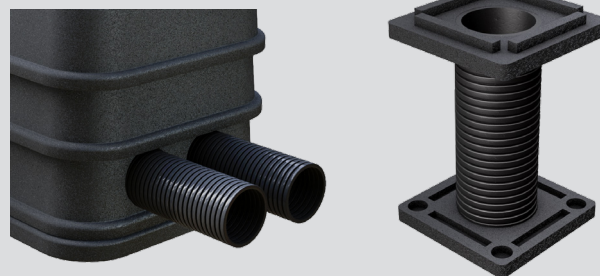
WATERTIGHT

Some contracts ask for a watertight chamber, especially if they contain electrical systems. This is easily achieved with Envirochamber. A recent test proves that the product can be 100% watertight against hydrostatic pressure.



INLETS OUTLETS

Inlets and outlets can either be core-drilled into the units on site, or at the factory to order to suit all pipe types and diameters, but we also manufacture some units with preformed holes.



STANDARD CHAMBER SECTION

The chamber sections are as per the details in the table below and offer a standard sized one-piece chamber section commonly used throughout the water utility market. We have six section depths being 25mm, 50mm, 75mm, 100mm, 150mm and 300mm.

They have been designed to stack/interlock easily and safely on top of one another. The outer shape of the sections taper from the base to the top to assist in the seating of the completed chamber.

Product Code	C/O Length	C/O Width	Depth	Weight	Number Per Pallet
ENCH25	430mm	280mm	25mm	1.7kg	100
ENCH50	430mm	280mm	50mm	3.5kg	100
ENCH75	430mm	280mm	75mm	5.2kg	100
ENCH10	430mm	280mm	100mm	7kg	80
ENCH15	430mm	280mm	150mm	10kg	50
ENCH30	430mm	280mm	300mm	12kg	40

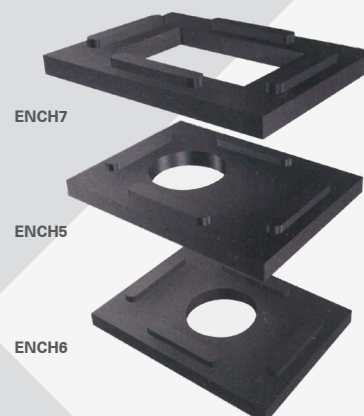
430 x 280 BASE SECTIONS

The utility market has a requirement for base sections in chambers. These may be useful in other market sectors. There are three types; an offset circular hole, a central circular hole and a new universal type with rectangular hole to fit over existing pipe work or valves - this is quickly becoming our

most popular unit.

The offset hole base and the central hole base are manufactured so they can be snapped into two parts on site to allow fitting around any exiting pipework.

Product Code	C/O Length	C/O Width	Depth	Weight	Number Per Pallet
ENCH50H	580mm	430mm	40mm	9.5kg	100
ENCH6CH	580mm	430mm	40mm	9.5kg	100
ENCH7RECTH	580mm	430mm	40mm	9.5kg	100



ONE-PIECE MANHOLE CHAMBERS

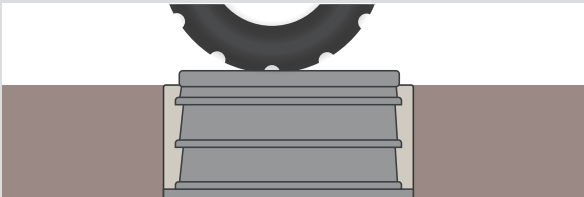
STOCKING LOGISTICS

Wastage on concrete units is in excess of 20% - 30% from stocking and logistics alone. Envirochamber will not break - and if they do, we replace free of charge!

GUARANTEE

DOESNT FAIL/CRACK POST INSTALLATION

Brick and concrete units are reliant on the structural surround. This has a human element that has potential for poor quality. Envirochamber has an inherent strength making it failure proof.



SV CHAMBERS

This chamber type was initially introduced for Sluice and Stop Valves. There are three opening sizes:- 150mm x 150mm, 180mm x 180mm, 230mm x 230mm - All available 75mm, 100mm and 150mm deep.

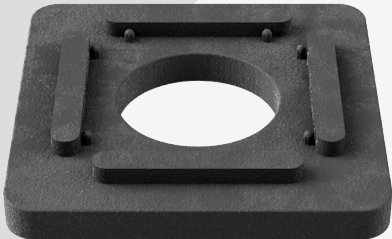
Units interlock together and depths can be integrated to meet the correct depth and bases are available for all sizes.

Product Code	C/O Length	C/O Width	Depth	Weight	Number Per Pallet
ENCHSV1	230mm	230mm	75mm	4.2kg	144
ENCHSV2	230mm	230mm	100mm	5.2kg	108
ENCHSV3	230mm	230mm	150mm	7.2kg	81
SV171775	170mm	170mm	75mm	4.0kg	144
SV171710	170mm	170mm	100mm	4.8kg	144
SV171715	170mm	170mm	150mm	6.0kg	108

SV CHAMBER BASE SECTION

Base sections are available for the SV Chamber Base sections. A standard 150mm x 150mm, 180mm x 180mm and 230mm x 230mm

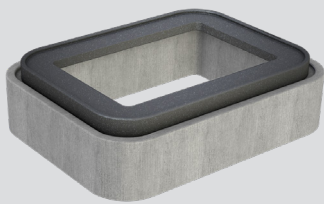
Product Code	C/O Length	C/O Width	Depth	Weight	Number Per Pallet
SV4 Base	480mm	480mm	45mm	6.0kg	100
SV1717 Range Base	480mm	480mm	50mm	5.0kg	200



ONE-PIECE MANHOLE CHAMBERS

RAISING PIECE AND CONCRETE ADAPTER

PDS also have a 25mm deep raising piece which fits on top of an assembled chamber to raise the height. It doubles as an adapter to convert a concrete chamber to plastic on an existing manhole.



MATERIAL - GREEN

The Envirochamber manhole sections are made entirely from recycled materials destined for landfill sites within the UK or overseas. This has helped to reduce the carbon footprint of not only PDS but also the producer of the waste plastic, transport companies and you, the final user of Envirochamber.

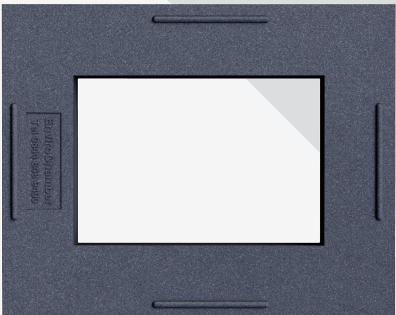
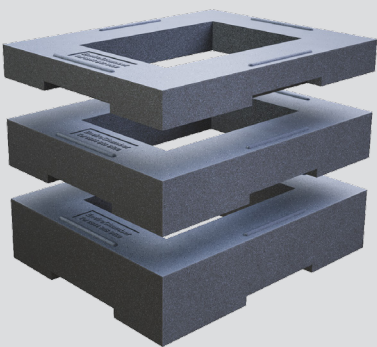


LARGE CHAMBER SECTION

The Envirochamber product range has been added to by our large chamber sections. These start at 450mm x 450mm and currently up to 1200mm x 900mm, all with a choice of depths.

Sections interlock, providing a firm and secure chamber build. The units will all take a D400KN unsupported load.

The benefits over brick and concrete chambers are numerous, including speed of installation and the time to traffic over the reinstatement.



Product Code	C/O Length	C/O Width	Depth	Weight	Number Per Pallet
ENCH454515	450mm	450mm	150mm	10kg	20
ENCH604575	600mm	450mm	75mm	16kg	32
ENCH604510	600mm	450mm	100mm	20kg	26
ENCH604515	600mm	450mm	150mm	15kg	20
ENCH606075	600mm	600mm	75mm	16kg	16
ENCH606010	600mm	600mm	100mm	18kg	13
ENCH906075	900mm	600mm	75mm	20kg	16
ENCH906010	900mm	600mm	100mm	25kg	13
ENCH126710	1200mm	675mm	100mm	37kg	13
ENCH127510	1200mm	750mm	100mm	42kg	13
ENCH129010	1200mm	900mm	100mm	45kg	13

ONE-PIECE MANHOLE CHAMBERS

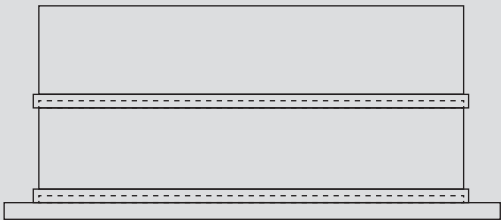
ACHILLES APPROVAL

PDS are now fully registered as a supplier on the Utilities Vendor Database for category 3.15.20 Surface Boxes & Chambers. (Supplier No 054794)



LOCATING RIBS

Envirochambers are designed to stack/interlock easily and safely on top of one another. The outer shape of the sections taper from the base to the top to assist in the seating of the completed chamber during back filling.



ANCILLARIES

PDS have always consulted with clients and end users when considering product development. On the Envirochamber range this has led to a number of ancillary products.

The 25mm deep raising piece has a dual purpose. It can raise our 430mm x 280mm chamber by 25mm and also provides an interlock between an existing concrete chamber and the Envirochamber. This allows a concrete unit to be left in place whilst increasing the depth with a more durable product.

We also have a range of bases which incorporate a shaft pipe and Top Hat to allow simple access to any valve or stop tap and also provide a Top Plate for use with Kettler Spindles.

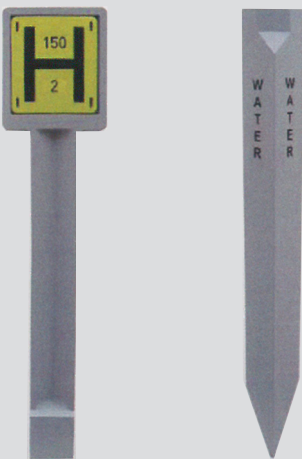


MARKER POSTS

Our posts are made from grey recycled plastic to simulate the look of concrete but without the inherent problems associated with products made from this conventional material.

The posts weigh approx 7kg as opposed to 20 to 25kg and therefore offer Health and Safety advantages.

Traditional concrete marker posts have breakage rates over 30% during transit and prior to installation. Vandals also seem to enjoy snapping concrete posts! The Envirochamber Marker post will not break prior to installation (PDS offer free replacements for ANY breakages) and vandals will need to be very determined to cause any damage.



Product Code	C/O Length	Weight	Number Per Pallet
ENCHMP990	990mm	7.0kg	80
ENCHMP1230	1230mm	8.0kg	80
ENCHFMP	990mm	6.0kg	100

ONE-PIECE MANHOLE CHAMBERS

COMPOSITE COVERS

To compliment the Envirochamber range, PDS were asked to develop a range of composite hydrant covers to replace stolen or damaged units. The lids are dropped into existing frames. We have now also added hydrant covers complete with frame for new infrastructure works.

These are all manufactured to **BS5834 Part 2 2011** grade **A** and **EN124 D400KN** loading. Frames are designed to sit on top of the chambers and hydrant covers are specific to the **430mm x 280mm** hydrant chambers badged accordingly **SV, FH, WO, METER**. Other badging is available.

The hydrant covers have been such a success that we have now added other composite covers to the range. A **150mm x 150mm** Heavy Duty surface box, a **450mm x 450mm D400**, a **600mm x 600mm**, a **900mm x 600mm B125**, **600mm x 450mm B125**, and a **600mm x 600mm B125**.

Once again, we are constantly developing the range of covers. Please call our office for an update on available sizes.

COMPOSITE COVERS



HYDRANT COVERS

Hydrant replacement cover for stolen metal covers



HYDRANT COVERS



BESPOKE

Logo badges **FH** in **BLACK** and **YELLOW**, **METER - AV - WO - SV - WATER** & specials to customers requirements.

Design Features

Can also be supplied in various colours such as **YELLOW** to RAL 1013 Traffic Yellow for fire hydrants, with or without locks. A metal plate is fitted to aid detection by Fire Brigades in overgrown positions.

Product	C/O Length	C/O Width	Loading
Surface Box	150mm	150mm	Heavy Duty
Hydrant Cover Only	430mm	280mm	D400KN
Hydrant Cover and Frame	430mm	280mm	D400KN
Cover and Frame	450mm	450mm	D400KN
Cover and Frame	600mm	600mm	B125KN
Cover and Frame	600mm	600mm	D400KN
Cover and Frame	900mm	600mm	B125KN

INSTALLATION GUIDES & BENEFITS

INSTALLATION GUIDE

STEP 1

Ensure that the area excavated is adequate to allow for the chamber's width and height and that there is a sufficient area for the backfill, in principle allowing 150mm for the backfill materials.



STEP 4

Backfill material can be well compacted "as dug" material. Envirochambers have been tested free standing without concrete surround to Class D400 BS EN124.



STEP 2

The sub base must be well compacted to depth of 100mm and either a purpose made or an in situ concrete base be formed making allowance for the incoming hydrant, sluice vavles etc.



STEP 5

It is usual to use a concrete haunching to cap off at least the last 100mm in height and also to enclose the frame and cover in C40 dry mix concrete if in a roadway.



STEP 3

Place units on top of each other with the deepest units at the bottom and shallowest ones at the top.



STEP 6

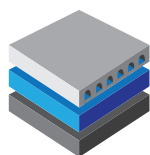
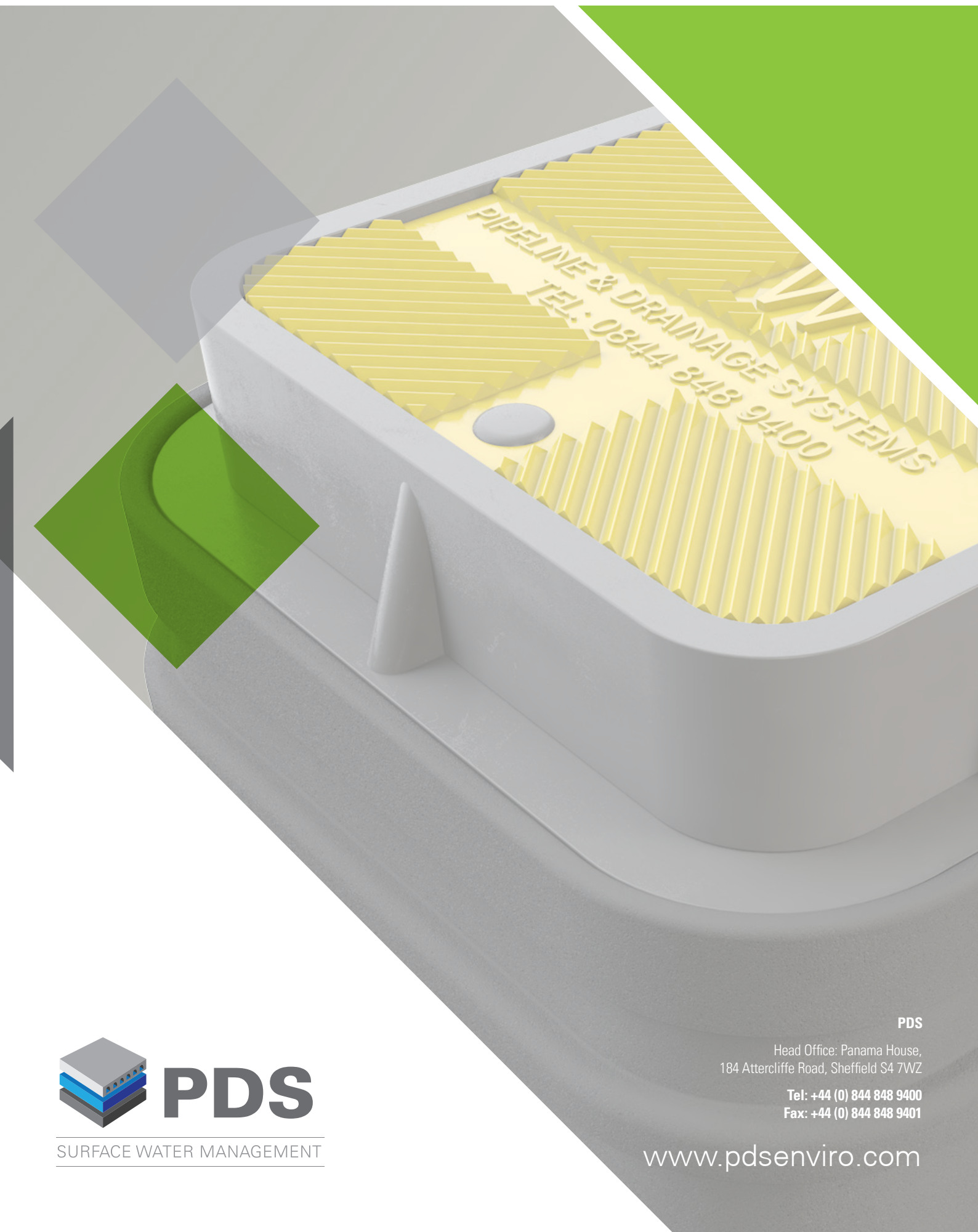
Envirochambers can be trafficked as soon as they are back filled and topped off with surfacing. No allowance for curing is required therefore reducing the timescales of expensive traffic management.



CERTIFICATES

PDS are the largest supplier of combined kerb drainage in Europe and have always been proud of our quality assurance, accreditation and certification that provides you with all the relevant assurances required for the Envirochamber range





PDS

SURFACE WATER MANAGEMENT

PDS

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