

Smarter Drainage

POLYBED[®]
DESIGNED FOR DRAINAGE

A high performance, versatile solution part of our water course protection systems.



Polybed[®] is an innovative drainage solution, that can save you around 40% material and labour costs and minimises environmental impact.

Polybed[®] drainage is a smarter alternative to the traditionally heavy aggregate based systems. The lightweight and flexible material used to produce Polybed[®] is ideal for use in a range of environments including restrictive and delicate conditions.

Our drainage system is engineered to enable contaminant filtration of heavy metals, de icing agents, hydrocarbons whilst allowing water to flow through to the managed water course or storage facility.



Customers have found Polybed[®] requires **significantly less** labour and plant resources, giving them quicker installation timescales over conventional drainage methods. Furthermore, the ground and turf recovery is especially appealing to their customers during landscaping and home development projects.

The versatility of Polybed[®] for both delicate, shallow and load bearing requirements and the flexibility to be routed around existing land structures has been proven time after time.

Supports the UK and EU European Water Framework Directive



Markets

*SUDs (Sustainable Urban Drainage Systems)
Infrastructure Planning
Water Management
Water and Waste
Septic & Sewerage
Civil Engineering
Sports & Leisure
Public Open Spaces
Transport Surfaces*

Applications

*Groundwork Maintenance & Drainage Remediation
Septic Waste Planning
Domestic & Storm water Soakaways
Property Protection
Urban & Environmental Planning
Retaining Wall & Foundation Drainage
Pitches & Greens
Holiday Parks & Sites*

Features

40% Cost & Labour savings
Innovative materials
Enhanced performance
Contaminant filtration
Ideal for delicate, shallow requirements
Quick & Lightweight - 1 man lift and fit
No aggregate required
Minimised land disruption*

* Based on figures from Redrow Homes 2016

Simple and cost effective

POLYBED[®]
DESIGNED FOR DRAINAGE

Polybed[®] drainage has been developed to meet the needs of specifiers and contractors everywhere for a sustainable, efficient and effective alternative to traditional, labour intensive and costly natural aggregate applications, whilst offering additional protection from flooding. The flexibility of Polybed[®] products makes them suitable for installation in a wide variety of configurations to suit it's application area.

As well as being ideal for use in the construction trade, landscaping and general groundworks, Polybed[®] has proven to be the perfect solution to a wide range of drainage problems within the sports and leisure sector.

Sports fields and golf course fairways and bunkers generally require a greater concentration of sub-surface drainage at shallow depths making Polybed[®] well suited to these applications too.

Polybed[®] systems are now being used in commercial high traffic areas such as car parks, for urban planning requirements and large scale development projects.

The system is highly suitable for many types of load bearing drainage needs and have been rigorously tested and recommended for road and transport requirements by NTEC at Nottingham University.

“Less cost, less waste and less materials needed – Innovation at its best”



Speak to our friendly sales team to find out more about **Polybed**[®].

When should I use Polybed®?

Polybed® - Ideal Applications

- Storm drainage and Soakaways
- Retaining wall and foundation drainage
- Septic tanks and sewage treatment
- Sports and Leisure
- Urban Planning

Polybed® Benefits

- 30-40% increased drainage flow
- Low level filtration
- Substantially reduces plant usage
- Substantially reduces aggregate and gravel
- Cost savings on plant, machinery and labour
- Extremely lightweight
- Speed and ease of installation
- Ideal for use in restricted areas
- Ideal for delicate and shallow requirements
- Loadbearing abilities for traffic
- Reduces your carbon footprint

Sustainable Urban Drainage (SUDs)

SUD systems is a best practice approach to urban water policy management and actively encourages 'cleaner water' practices.

For SUDs and other construction applications, the Polybed® System can be supplied encapsulated with a tough, resilient non-woven needle punched geotextile layer which offers enhanced infiltration and reduces the risk of long term clogging. Polybed® drainage is ideally placed to support guidelines and initiatives on:

- Water harvesting and filtration
- Mitigation and Reduction of pollution and materials
- Bunding of structures.

SUDs facilities include:

1. Permeable surfaces;
2. Filter strips and infiltration trenches;
3. Swales and Detention basins;
4. Bio retention systems e.g. raingardens, wetlands and ponds.



Polybed® offers drainage even on irregular ground levels

“As good, if not better than conventional drainage!”

The load bearing capability of Polybed® has been tested by The University of Nottingham's Transportation Engineering Centre (NTEC) utilising their industry leading pavement engineering test facility.

NTEC's testing has demonstrated the suitability of Polybed® as an alternative to traditional pipe and aggregate drainage systems in a range of transport applications such as highway and vehicle parking.

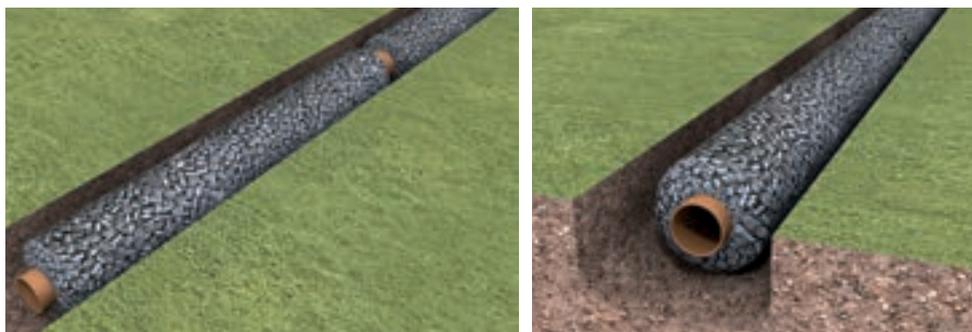


NTEC's compression and flow testing facility for load bearing surfaces.

Effortless Installation – ‘Click and Fit’

Each Polybed® pipe is a 3 metre length of standard diameter perforated pipe surrounded by an EPS aggregate.

Each Polybed® pipe is a 3 metre length of standard diameter perforated pipe surrounded by an EPS aggregate. This is manufactured from recycled expanded polystyrene and engineered for optimum performance with consistent form to aid water flow. It replaces the need for conventional aggregate whilst providing a low level filter system for heavy metals, de icing agents, hydrocarbons and other known pollutants. The pipe and EPS is encased in polyethylene netting to create a maintained form, which will eliminate 'slumping' under load bearing surfaces and traffic.



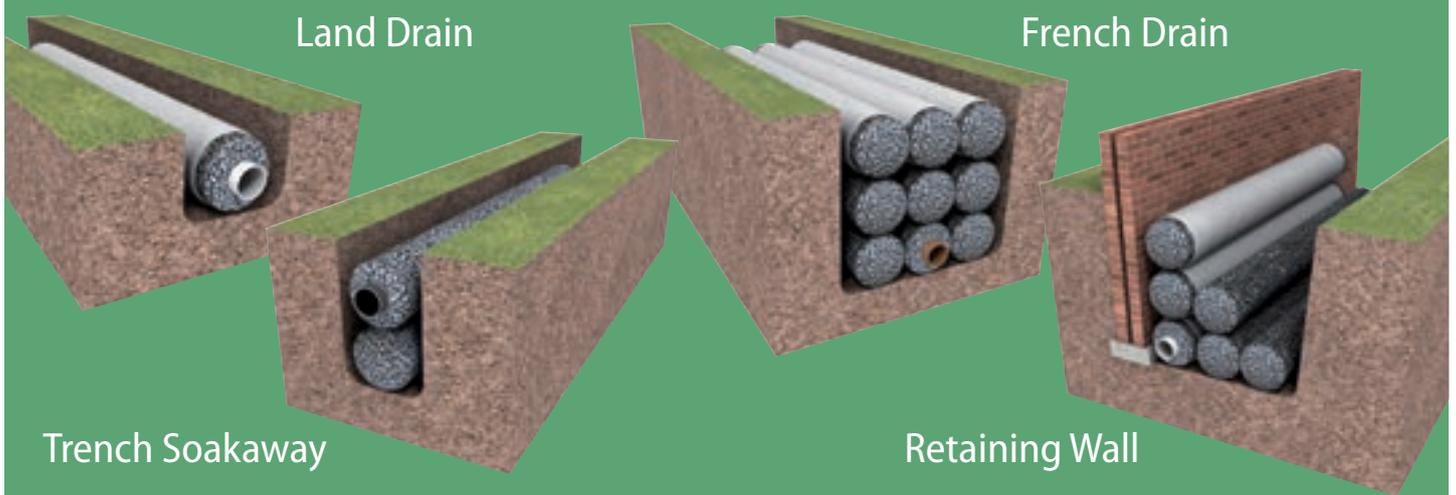
Connecting the 3m long Polybed sections is a quick ‘click-fit’ connection by the use of proprietary couplers.



“As good, if not better than conventional drainage”!

Polybed [®] Range	Typical Applications	Pipe Size	Pipe Internal Dia.	Pipe External Dia	Overall Size	Unit KG
Single wall perforated land drain Single wall land drain BS 4962 	Sub-surface drainage fields, stormwater soakaways, french drains, filter infiltration fields, foundation and retaining wall systems.	3", 4" or 6"	71.5mm, 90mm or 146mm	80mm, 100mm or 160mm	3000mm (L) x 175mm, 300mm or 375mm (D)	2.03kg, 3.5kg or 5.2kg
Twin wall perforated pipe Twin wall BBA 02 / H069 	All applications.	4" or 6"	94mm or 150mm	110mm or 178mm	3000mm (L) x 300mm or 375mm (D)	4.4kg or 7.2kg
Solid sewer perforated pipe Single wall sewer BS EN 13476-3 /1404-1 	Septic tank and water treatment percolation fields.	4" or 6"	102mm or 152mm	110mm or 160mm	3000mm (L) x 300mm or 375mm (D)	7.2kg or 12.7kg
Polyagg (Synthetic aggregate – no pipe) Polyagg bundles 	All applications including retaining wall and stormwater soakaways.	–	–	–	3000mm (L) x 175mm, 300mm or 375mm (D)	1.3kg, 2.6kg or 3.8kg

Examples of typical Polybed[®] configurations



Polybed[®] is part of Forest Drainage Products Ltd - a division of: