

Pipe Doctor

NO-DIG PIPE REPAIR SYSTEM



For the permanent and watertight repair of
damaged pipework, without excavation.



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Introduction



The Pipe Doctor system was created for the permanent and watertight repair of below-ground pipes, without the need for excavation. This trenchless repair method saves time and cost on-site and reduces disruption to the surrounding area.

Benefits

- No costly, time-consuming, disruptive excavation work
- Excellent bonding to virtually any substrate
- Cures in the presence of water
- Available in bulk form or in kit format

The system includes all of the products necessary for this type of repair, from the compressor to the resin and matting and everything in between.

Pipe Doctor products create a professional repair to damaged straight pipes and to swept bends, up to an angle of 90°.

The original kit format provides everything needed for a single repair, however, materials can also be purchased in bulk.

Resin is available in Summer, Winter and Rapid compositions, to suit the conditions at the time of installation.



WRc approved system: PT/379/0316

For pipes from DN70 - DN560.

Available in 550mm and 1000mm lengths.

Available with summer or winter resin, for the best working and curing times for the ambient temperature



Product range

Code	Product Description
PD100KITS	DN100 Pipe, Summer resin
PD100KITW	DN100 Pipe, Winter resin
PD100RAPID	DN100 Pipe, Rapid resin
PD1M100KITS	DN100 pipe, 1m Long, Summer resin
PD1M100KITW	DN100 pipe, 1m Long, Winter resin
PD150KITS	DN150 Pipe, Summer resin
PD150KITW	DN150 Pipe, Winter resin
PD150RAPID	DN150 Pipe, Rapid resin
PD1M150KITS	DN150 Pipe, 1m Long, Summer resin
PD1M150KITW	DN150 Pipe, 1m Long, Winter resin
PD1M150RAPID	DN150 Pipe, 1m Long, Rapid Resin
PD225KITS	DN225 Pipe, Summer resin
PD225KITW	DN225 Pipe, Winter resin
PD1M225KITS	DN225 Pipe, 1m Long, Summer resin
PD1M225KITW	DN225 Pipe, 1m Long, Winter resin

Code	Product Description
PD300KITS	DN300 Pipe, Summer resin
PD300KITW	DN300 Pipe, Winter resin
PD1M300KITS	DN300 Pipe, 1m Long, Summer resin
PD1M300KITW	DN300 Pipe, 1m Long, Winter resin
PD375KITS	DN375 Pipe, Summer resin
PD375KITW	DN375 Pipe, Winter resin
PD1M375KITS	DN375 Pipe, 1m Long, Summer resin
PD1M375KITW	DN375 Pipe, 1m Long, Winter resin
PD450KITW	DN450 Pipe, Winter resin
PD1M450KITS	DN450 Pipe, 1m Long, Summer resin
PD1M450KITW	DN450 Pipe, 1m Long, Winter resin
PD525KITS	DN525 Pipe, Summer resin
PD525KITW	DN525 Pipe, Winter resin
PD1M525KITW	DN525 Pipe, 1m Long, Winter resin



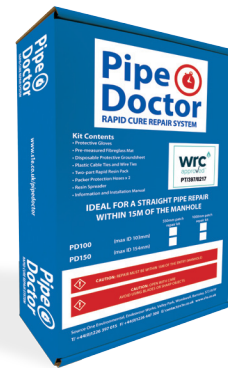
For straight repairs, with a faster cure time

WRc approved system: PT/397/0217

Includes a fast-curing resin. Recommended for use within 15 metres of the manhole.

For pipes of DN100, DN150 and DN225.

Available in 550mm and 1000mm lengths.



Product Range

Code	Description
PD100RAPID	Pipe Doctor Rapid Repair Kit DN100 Pipe
PD150RAPID	Pipe Doctor Rapid Repair Kit DN150 Pipe
PD1M150RAPID	Pipe Doctor 1m Rapid Repair Kit DN150
PDBRKR	Bulk Resin Kit Rapid 2:1 Ratio



The original kit format

Available in Straight, Rapid & Radius versions

Includes everything needed to create a single, professional repair:

- Protective gloves
- Pre-measured fibre glass mat
- Protective groundsheet
- Plastic cable ties and wire ties
- Two-part resin bag
- Packer protection
- Resin spreader
- Information and installation manual

For pipes of DN100 and DN150.

Patches of 600mm lengths.

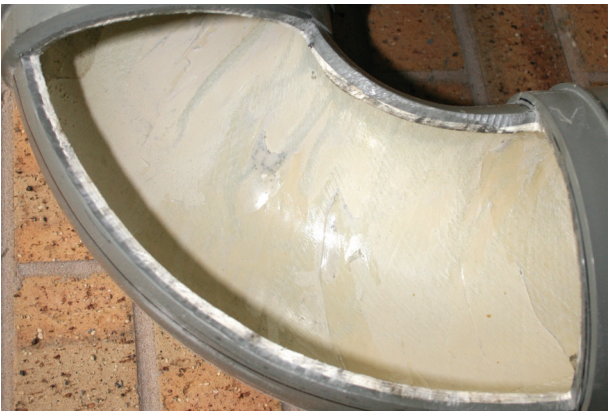
Especially designed for a smooth patch repair on a radius

Available with summer or winter resin, for the best working and curing times for the ambient temperature



Product Range

Code	Description
PDR100KITS	PD Radius Repair Kit DN100 Pipe (S)
PDR100KITW	PD Radius Repair Kit DN100 Pipe (W)
PDR150KITS	PD Radius Repair Kit DN150 Pipe (S)
PDR150KITW	PD Radius Repair Kit DN150 Pipe (W)
PDRP10/15	Asmbld Rad Packer for DN100 1500mm Long
PDRP15/15	Asmbld Rad Packer for DN150 1500mm Long



Contractor Packs

All the equipment needed to start out in no-dig patch repair or to kit out a new van.

Includes training for up to two operators, with the WRc-approved and EUSR-accredited Pipe doctor training course (see p.13)



Benefits

- Everything needed for straight repairs, in one handy pack
- Independently certified training included
- Includes WRc-approved kits for straight repairs
- Available with 10, 15 or 20 push rods
- High quality equipment



The complete pack

Includes all the equipment needed to begin professional no-dig patch repairs:

- WRc-approved Pipe Doctor repair kits
- DN100/150 standard packer
- Air push rods (10, 15 or 20)
- Flexible adaptor
- Pressure regulator
- Oil free compressor
- Flexible extension hose
- E&U Skills-certified training for two operatives

Product Code	Description
PDP10/1	Contractor Pack 1 (10 push rods)
PDP15/2	Contractor Pack 2 (15 push rods)
PDP20/3	Contractor Pack 3 (20 push rods)



Independently accredited training is included in Contractor Packs - see p.13 for more info.

Air Push Rods

A robust rod that is used both to push the packer down the pipe, into position for the repair, and to inflate it.

Each length of rod is supplied with a male connection at one end and a female connection at the other.

Standard push rods have a 4mm wall thickness.



Product range

Code	Description
PDAPR15B	Air Push Rod Blue 1.5m Long
PDPRA01	Packer Drain Rod Adaptor
PDAPR15B/5	Five Air Push Rods Blue 1.5m Long
PDAPR15B/10	Ten Air Push Rods Blue 1.5m Long

Code	Description
PDAPR15B/20	Twenty Air Push Rods Blue 1.5m Long
PDAPR15B/30	Thirty Air Push Rods Blue 1.5m Long
PDAPR15B/50	Fifty Air Push Rods Blue 1.5m Long



ProPush 100

Easy-to-use pressurised push rods

Benefits

- Flexibility to push through tight bends
- One continuous pressurised push rod in 30m or 15m rolls
- Quick inflation for all size packers
- Compact for storage
- Lightweight & easy to use, yet durable
- Has been subjected to extensive field testing
- No joints, so no risk of leaks



Product range

Code	Description
PD-PROPUSH-30M	ProPush100 30m roll
PD-PROPUSH-15M	ProPush100 15m roll

Circular Packers

A comprehensive range of traditional packers to be used with the Pipe Doctor no-dig patch repair system.

A wide range of sizes and types are available, including those for both straight and radius repairs.

Benefits

Wide range of sizes available for straight repair:

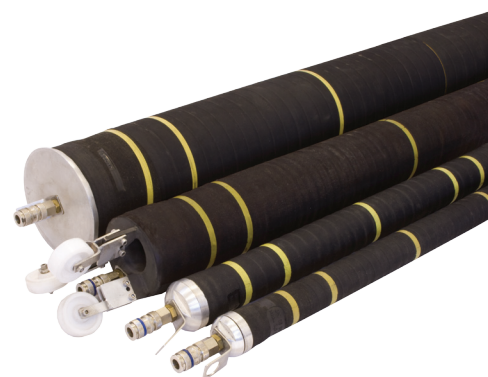
- For diameters between 25mm & 1200mm
- Lengths between 600mm & 5000mm

Packers available for radius repairs around a 90° bend for DN100 & DN150 pipes

Four types of packer are available:

- Standard packers are the lowest cost
- Wheeled packers offer greater manoeuvrability
- Flow-through packers allow the repair to take place without stopping the flow through the pipe
- Radius packers are used for repairs on bends, with the Radius Kits

*Quality hire service available, with every packer cleaned, checked and maintained for every hire period



Product range

Code	Description
PDPRA01	Packer Drain Rod Adaptor
Packers	
PDSP7/10/10	Asmbld Packer 1000mm Long DN70/DN100
PDSP7/10/15	Asmbld Packer 1500mm Long DN70/DN100
PDSP7/10/45	Asmbld Packer 4500mm Long DN70/DN100
PDSP10/15/6	Asmbld Packer 600mm Long DN100/DN150
PDSP10/15/10	Asmbld Packer 1000mm Long DN100/DN150
PDSP10/15/15	Asmbld Packer 1500mm Long DN100/DN150
PDSP10/15/19	Asmbld Packer 1900mm Long DN100/DN150
PDSP10/15/25	Asmbld Packer 2500mm Long DN100/DN150
PDSP10/15/30	Asmbld Packer 3000mm Long DN100/DN150
PDSP10/15/50	Asmbld Packer 5000mm Long DN100/DN150
PDSP15/20/10	Asmbld Packer 1000mm Long DN150/DN200
PDSP15/20/15	Asmbld Packer 1500mm Long DN150/DN200
PDSP15/25/10	Asmbld Packer 1000mm Long DN150/DN250
PDSP15/25/15	Asmbld Packer 1500mm Long DN150/DN250
PDSP20/30/15	Asmbld Packer 1500mm Long DN200/DN300
PDSP30/40/10	Asmbld Packer 1000mm Long DN300/DN400
Wheeled Packers	
PDWP10/15/10	Asmbld Whld Pker 1000mm Lng DN100/150
PDWP15/25/10	Asmbld Whld Pker 1000mm Long DN150/250

Code	Description
PDWP15/25/15	Asmbld Whld Pker 1500mm Long DN150/250
PDWP15/25/19	Asmbld Whld Pker 1900mm Long DN150/250
PDWP15/25/25	Asmbld Whld Pker 2500mm Long DN150/250
PDWP15/25/35	Asmbld Whld Pker 3500mm Long DN150/250
PDWP15/25/50	Asmbld Whld Pker 5000mm Long DN150/250
PDWP20/30/10	Asmbld Whld Pkr 1000mm Long DN200/300
PDWP20/30/15	Asmbld Whld Pkr 1500mm Long DN200/300
PDWP20/30/20	Asmbld Whld Pkr 2000mm Long DN200/300
PDWP30/40/10	Asmbld Whld Pkr 1000mm Long DN300/400
PDWP30/40/15	Asmbld Whld Pkr 1500mm Long DN300/400
PDWP30/40/19	Asmbld Whld Pkr 1900mm Long DN300/400
PDWP45/60/10	Asmbld Whld Pkr 1000mm Long DN450/600
PDWP45/60/15	Asmbld Whld Pkr 1500mm Long DN450/600
PDWP45/60/19	Asmbld Whld Pkr 1900mm Long DN450/600
PDWP60/80/10	Asmbld Whld Pkr 1000mm Long DN600/800
PDWP60/80/15	Asmbld Whld Pkr 1500mm Long DN600/800
Radius Packers	
PDRP10/15	Asmbld Rad Packer for DN100 1500mm Long
PDRP15/15	Asmbld Rad Packer for DN150 1500mm Long

Pillow Packer

A fold-flat, oblong inflatable packer for repairs to larger diameter infrastructure.

Pillow packers are easy to manoeuvre, for an easier installation of the patch.

Benefits

- Available in three sizes: 750-900mm, 1000-1200mm and 1200-1800mm
- Can be manufactured to bespoke sizes
- Flexible to manoeuvre
- Appox. 30% lighter weight than standard packers of the equivalent size
- Folds flat for easy transportation
- Inflates to fit the shape of the damaged infrastructure; repair ovoid as well as circular pipes
- Repair is structural, dependent on layers installed



Product Range

Product Code	Description
FPP-PILLOW-3036X48	750-900mm x 1200mm Pillow Packer
FPP-PILLOW-4248X48	1000-1200mm x 1200mm Pillow Packer
FPP-PILLOW-4872X48	1200-1800mm x 1200mm Pillow Packer
FPP-REG-FF-ASM-30	Air Regulator (0-2 bar)

Bulk matting and resin available for use with Pillow Packers - please see p.12 or call 01226 397015 for more details.



Pipe Stoppers

A range of multi size pipe stoppers, used for blanking off a pipe for air testing, water testing or flow stopping for a repair.

Benefits

- Allowable Back Pressure 0.5 bar ** (5m head of water)
- Inflation Pressure 1.5 bar
- Standard Series 26 Connectors
- Wide expansion range will work in all types of pipe
- Lightweight : most sizes can be installed by one man
- Reinforced Synthetic Rubber: maximum durability
- Available in Nitrile for Hydrocarbon applications
- Compressor or hand-pump inflation accessories
- Special sizes on request



** Maximum inflation & back pressures are for stoppers fully inserted into the pipe and mechanically braced against slippage

Product Range

Code	Description
PDAB50100	Pipe Stopper DN50/100
PDAB70150	Pipe Stopper DN70/150
PDAB100200	Pipe Stopper DN100/200
PDAB150300	Pipe Stopper DN150/300
PDAB200400	Pipe Stopper DN200/400

Code	Description
PDAB200500	Pipe Stopper DN200/500
PDAB300600	Pipe Stopper DN300/600
PDAB5001000	Pipe Stopper DN500/1000
PDAB6001200	Pipe Stopper DN600/1200



Silicate Resin

Pipe Doctor silicate resin for point repair is available in pre-measured bags, within our Patch repair kits, or in bulk.

Three types of resin are available:
Winter (W), Summer (S) and Rapid (R).

Benefits

- High temperature resistance
- Excellent chemical resistance compared to all other pipe repair resins
- Water-glass based polysilicate resin for strength and flexibility due to unique cross-linked molecular formula
- Able to cure in the presence of water, for no washout during installation
- Excellent bonding properties to most materials
- Excellent migration properties between the resin and fibreglass mat, for consistent impregnation
- Non-flammable, so ideal for airports, hospitals, stations and other public places
- Non-hazardous, so no transport or disposal problems
- Odourless, so ideal in confined spaces

Product range

Code	Description
PDBRKR	Bulk Resin Kit Rapid 2:1 Ratio
PDBRKS	Bulk Resin Kit Summer 2:1 Ratio
PDBRKW	Bulk Resin Kit Winter 2:1 Ratio



Unique pre-measured resin bag

(supplied in Pipe Doctor kits)

- Always the correct mix - guaranteed
- No contact with unmixed resins
- Double-sealed secure bag
- No wastage
- Safe disposal of bag
- Transparent bag for visual check when mixing the resin
- Supplied in two sections, separated by a plastic sealing clip - working time only begins when actively mixed by removing clip



Bulk Materials & Accessories

Pipe Doctor materials are available in bulk form as well as in kits for individual repairs.

All the necessary accessories for no-dig repair are also available within the Pipe Doctor range.



Product range

Bulk Materials

Code	Description
Matting	
PDBM1250	Bulk Matting 1250mm Wide (Stock Unit kg)
PDBM2500	Bulk Matting 2500mm Wide (Stock Unit kg)
PDRBM1250	Rad Bulk Matt 1250mm Wide (Stock Unit kg)

Code	Description
Resin	
PDBRKR	Bulk Resin Kit Rapid 2:1 Ratio
PDBRKS	Bulk Resin Kit Summer 2:1 Ratio
PDBRKW	Bulk Resin Kit Winter 2:1 Ratio

Pipe Doctor Connectors, Gauges, Adaptors, Manifolds, Inflation Hoses

Code	Description
PDCHECKGAUGE	Pressure Gauge with Series 25 Plug
PDFA1	Flexible Adaptor
PDFP01	Hand Pump
PDIH05	Inflation Hose 5mt
PDIH10	Inflation Hose 10mt

Code	Description
PDIH30	Inflation Hose 30M
PDMANIFOLD3	Nickel Plated 3-way manifold
PDPR1	Press Reg, Gauge and Isolating Valve
PDFP01	Hand Pump
PDPRA01	Drain Rod Adaptor

Pipe Doctor Accessories

Code	Description
PDLFT100	Polyethylene LFT 157 x 400g for DN100
PDLFT150	Polyethylene LFT 235 x 400g for DN150
PDLFT225	Polyethylene LFT 353mm x 400g for DN225
PDLFT300	PDLFT 472mm x 400g for DN300
PDPESHEET2500	Poly Sheet 2500 x 400g (Per 1 Metre)
PDRWRAP	Polyethylene Wrap for Rad System 400x6m
PDSPATULA	Impregnation Spatula
PDTIES2	Plastic Cable Ties 780 x 9.0

Code	Description
PDWIREROLL	Copper Binding Wire 22SWG Roll
PDWRAPBULK	Bulk Polythene Wrap 300m
TLS03	T Plastic Handle Ball End Allen Key
TLS11	Mini Hand Deburring Tool
TLS19	54mm Diamond Saw Kit
PDC25-180	Oil Free 25L Port Com Stock No: 2497
PDCH1	1m C/Hose with Series 25 Male Fittings

Training

Approved by:



Accredited by:

energy&utilityskills

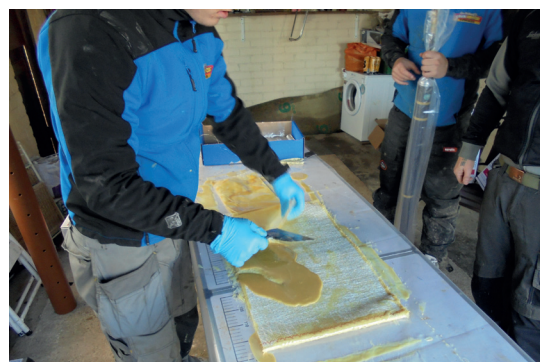
Training is offered in no-dig patch repair, providing an opportunity for operators to gain confidence in this technique. The course is approved by WRC and certified by Energy & Utility Skills.

Training can take place either at S1E's training facility or at customers' depots.



Benefits

- Practical hands-on course, including trainees making their own repair to a damaged pipe
- Can be conducted either at our Head office or at customers' depots, if this is more convenient
- Can be tailored to first-timers or as part of a refresher session
- Training from experienced trainers, specialists in the field of drainage
- Independent accreditation from WRC and Energy & Utility Skills for the course in installing the WRC Approved Pipe Doctor
- Trainees receive a recognised certificate and identity card to prove their proficiency



Independent Testing

Exova (UK) Limited – 6 Coronet Way, Centenary Park, Salford M50 1RE

- Initial specific ring stiffness & dry creep factor, 10,000 hour; August 2013
- Initial specific ring stiffness & dry creep factor, 1,000 hour; August 2012
- Compression testing of the Pipe Doctor glass reinforced silicate resin; January 2013
- Tensile strength and modulus testing with Posissons Ratio; May 2013
- 3 x Tensile strength and modulus testing; June 2013
- Short term flexural testing; May 2010

WRc plc – Frankland Road, Blagrove, Swindon SN5 8YF

- WRc Approval - Certificate no. PT/379/0316; March 2016 (first approved March 2011)
- WRc Approval for Pipe Doctor Rapid - Certificate no. PT/397/0217; Feb 2017
- WRc Approval for Pipe Doctor Patch Repair Training Course - Certificate no. PT/424/0318; March 2018

ATV-M 127-2

- Design check certificate, in accordance with the German design code ATV-M 127-2
- Endorsed by University of Applied Sciences, Corrensstraße 25, 48149 Münster, Germany; April 2013

BRE Global – Bucknalls Lane, Watford, Herts WD25 9XX

- Fire Test; September 2013

Energy and Utility Skills Limited – Friars Gate, 1011 Stratford Road, Shirley, Solihull B90 4BN

- S1E are an approved learning provider for the Pipe Doctor No-Dig Patch Repair Course; February 2012

Lanes for Drains – 17 Parkside Lane, Parkside Industrial Estate, Beeston, Leeds LS11 5TD

- WRc approval for the installation by Lanes Group plc of the Pipe Doctor system for both kits and bulk products; February 2013

Thames Water – Gainsborough House, Manor Farm Road, Reading RG1 0JN

- Approval for use; August 2004

Dublin City Council – Wood Quay, Dublin, Ireland

- Approval for use; April 2004

Pipe Doctor Chemical Resistance Chart

- Please contact Source One Environmental on +44 (0)1226 397015 or contact@s1e.co.uk for a full list detailing the chemical resistance of Pipe Doctor products



Other S1E Drainage Products

Lining Equipment & Supplies



Cutting & Cleaning equipment, inc. robotics



Rat Blockers



Inspection Systems



Drain Repair Consumables

AccessPoint **DrainDye**

Pipe Doctor Packer Hire Service

Offer your customers repairs of any size without investing in the purchase of every possible size of packer. High quality service with all packers cleaned & maintained after every hire.



Essential everyday consumables also available.

Pipe Doctor

NO-DIG PIPE REPAIR SYSTEM

The Pipe Doctor No-Dig repair system includes products for the repair of damaged pipes, without excavation. This trenchless method lowers cost and reduces disruption.

Damage on both straight and bent sections of pipe can be repaired using Pipe Doctor. Three types of resin are available, for the best working and curing times for the ambient temperature: Summer, Winter and Rapid.

Pipe Doctor is available in kit form, including everything needed for a single repair. Bulk materials can also be purchased.

The Pipe Doctor system, and Rapid system, are WRc approved, as is the Pipe Doctor Patch Repair Training Course.



Cooper House, Unit 2 Spring Hill Road, Park Springs, Grimethorpe, Barnsley S72 7BQ, UK.

T: +44 (0) 1226 397 015 F: +44 (0) 1226 447 300 E: contact@s1e.co.uk

www.s1e.co.uk

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