



**MISSION**  
RUBBER UK

# PIPE REPAIR KITS

**NO DIG LOCALISED  
REPAIR OF SEWERS  
AND DRAINS**

Mission Pipe Repair Kits together with Mission packers provide a reliable and cost effective system for the permanent and watertight localised repair of sewers and drains by the No-Dig technique. By eliminating the need for costly and often disruptive excavation these Kits save the contractor time and money.

Each Kit contains all the materials required for a single repair and by reducing both preparation time and wastage is a cost effective alternative to purchasing materials in bulk.

## CONTENTS

2 part resin in separate bottles for ease of mixing and use  
Fibreglass mat  
2 packer protection sleeves  
Protective groundsheet  
2 pairs protective gloves  
Spreader  
Cable and wire ties

## BENEFITS

- Minimum disruption due to No-Dig application
- Quick and easy to use
- Permanent and watertight repair
- Reduces preparation time and wastage
- Pre-measured components ensures accurate mixing of resin
- Elimination of resin mixing buckets and measuring cylinders
- System has German DIBt Approval
- 50 year projected lifespan for the completed repair

## APPLICATIONS

Repair of cracked, fractured and broken pipes, including clay, concrete, pitch fibre, asbestos cement, cast iron and PVCu pipes.

Repair of pipe joints damaged by root intrusion or ground movement

Bonds to most pipe materials

## MATERIALS

### Resin

The resin is supplied in two grades for winter use, ambient temperature 5°C to 20°C, and for summer use, ambient temperature over 20°C. It is a two-component organic-mineral resin developed specifically to impregnate glass fibre matting for the internal repair of sewers and drains.

### Properties

- Low viscosity, ideal for the repair of sewers and drains exposed to constant humidity
- Resistant to the range of acids and alkalis normally found in sewers and drains
- Good adhesion to damp pipe surfaces
- Can be used most pipe materials including, clay, concrete, pitch fibre, asbestos cement, cast iron and PVCu
- Harmless once cured

### Fibreglass

The matting is made from Owen Corning's Advantex glass fibre material. This is a boron free E glass with significantly improved resistance to the corrosion effects of a range of environments. In all aqueous environments tested to date, the Advantex glass reinforced composite materials have provided better corrosion resistant performance than similar materials with traditional E-glass.

## APPROVALS

The Mission Pipe Repair Kit is approved by the Deutsches Institut für Bautechnik, Berlin for the localised repair of sewers and drains, DN100 to DN500



## INSTALLATION PRODUCTS

Mission Rubber also supplies a range of products to help the contractor to install the Repair Kits. These include starter kits for the contractor new to No-Dig repair.

### Equipment includes

Lateral Packers DN70 to DN600 up to 5000mm long  
Flexible Wheeled Packers DN100 to DN1200 up to 5000mm long with by-pass from DN150  
Air Push Rods 1.5m long  
Lockfast Drain Rods  
Hose with series 26 couplings  
Oil free Compressor 25l  
Compressor Controllers 1.5 and 2.5 bar  
Regulator with pressure gauge and shut off valve

## BULK PRODUCTS

All components of the Pipe Repair Kits can be supplied in bulk if required.



Awaiting photo of kit



## PIPE REPAIR KITS

Part Number	Size Range	Working Time <small>subject to humidity &amp; ambient temperature</small>	Cure Time
<b>100mm Dia</b>			
MRK10006W	Repair kit 600mm long	15mins	1.5hrs
MRK10010W	Repair kit 1000mm long	15mins	1.5hrs
MRK10015W	Repair kit 1500mm long	15mins	1.5hrs
MRK10006S	Repair kit 600mm long	25mins	3.5hrs
MRK10010S	Repair kit 1000mm long	25mins	3.5hrs
MRK10015S	Repair kit 1500mm long	25mins	3.5hrs
<b>150mm Dia</b>			
MRK15006W	Repair kit 600mm long	15mins	1.5hrs
MRK15010W	Repair kit 1000mm long	15mins	1.5hrs
MRK15015W	Repair kit 1500mm long	15mins	1.5hrs
MRK15006S	Repair kit 600mm long	25mins	3.5hrs
MRK15010S	Repair kit 1000mm long	25mins	3.5hrs
MRK15015S	Repair kit 1500mm long	25mins	3.5hrs
<b>225mm Dia</b>			
MRK22506W	Repair kit 600mm long	15mins	1.5hrs
MRK22510W	Repair kit 1000mm long	15mins	1.5hrs
MRK22506S	Repair kit 600mm long	25mins	3.5hrs
MRK22510S	Repair kit 1000mm long	25mins	3.5hrs
<b>300mm Dia</b>			
MRK22506W	Repair kit 600mm long	15mins	1.5hrs
MRK22510W	Repair kit 1000mm long	15mins	1.5hrs
MRK22506S	Repair kit 600mm long	25mins	3.5hrs
MRK22510S	Repair kit 1000mm long	25mins	3.5hrs
<b>375mm Dia</b>			
MRK30006W	Repair kit 600mm long	15mins	1.5hrs
MRK30010W	Repair kit 1000mm long	15mins	1.5hrs
MRK30006S	Repair kit 600mm long	25mins	3.5hrs
MRK30010S	Repair kit 1000mm long	25mins	3.5hrs
<b>450mm Dia</b>			
MRK30006W	Repair kit 600mm long	15mins	1.5hrs
MRK30010W	Repair kit 1000mm long	15mins	1.5hrs
MRK30006S	Repair kit 600mm long	25mins	3.5hrs
MRK30010S	Repair kit 1000mm long	25mins	3.5hrs
<b>525mm Dia</b>			
MRK30006W	Repair kit 600mm long	15mins	1.5hrs
MRK30010W	Repair kit 1000mm long	15mins	1.5hrs
MRK30006S	Repair kit 600mm long	25mins	3.5hrs
MRK30010S	Repair kit 1000mm long	25mins	3.5hrs
MSTK001	<b>Starter Kit</b> Comprising of:- Packer 100mm-150mm 1500mm long Short Flexible Hose 1.5M push rods (10 off) 1.5M Hose Compressor 25 Litre 240V with regulator Repair Kits 100mm dia x 1000mm long 6No. Repair Kits 150mm dia x 1000mm long 4No.		

## FLEXIBLE WHEELED PACKERS WITH BY-PASS

(except where noted)

pmt FN101510	100mm-150mm dia x 1000mm long (no by-pass)		
pmt FN101515	100mm-150mm dia x 1500mm long (no by-pass)		
pmt FN101520	100mm-150mm dia x 2000mm long (no by-pass)		
pmt FN101525	100mm-150mm dia x 2500mm long (no by-pass)		
pmt FN101530	100mm-150mm dia x 3000mm long (no by-pass)		
pmt FN101540	100mm-150mm dia x 4000mm long (no by-pass)		
pmt FN101550	100mm-150mm dia x 5000mm long (no by-pass)		
pmt FN152510	150mm-250mm dia x 1000mm long (no by-pass)		
pmt FN152515	150mm-250mm dia x 1500mm long (no by-pass)		
pmt FN152520	150mm-250mm dia x 2000mm long (no by-pass)		
pmt FN152525	150mm-250mm dia x 2500mm long (no by-pass)		
pmt FN152530	150mm-250mm dia x 3000mm long (no by-pass)		
pmt FN152540	150mm-250mm dia x 4000mm long (no by-pass)		
pmt FN152550	150mm-250mm dia x 5000mm long (no by-pass)		
pmt F152510	150mm-250mm dia x 1000mm long		
pmt F152515	150mm-250mm dia x 1500mm long		
pmt F152520	150mm-250mm dia x 2000mm long		
pmt F152525	150mm-250mm dia x 2500mm long		
pmt F152530	150mm-250mm dia x 3000mm long		
pmt F152540	150mm-250mm dia x 4000mm long		
pmt F152550	150mm-250mm dia x 5000mm long		
pmt F203010	200mm-300mm dia x 1000mm long		
pmt F203015	200mm-300mm dia x 1500mm long		
pmt F203020	200mm-300mm dia x 2000mm long		
pmt F203030	200mm-300mm dia x 3000mm long		
pmt F203040	200mm-300mm dia x 4000mm long		
pmt F203050	200mm-300mm dia x 5000mm long		
pmt F304010	300mm-400mm dia x 1000mm long		
pmt F304015	300mm-400mm dia x 1500mm long		
pmt F304020	300mm-400mm dia x 2000mm long		
pmt F304030	300mm-400mm dia x 3000mm long		
pmt F304040	300mm-400mm dia x 4000mm long		
pmt F304050	300mm-400mm dia x 5000mm long		
pmt F456010	450mm-600mm dia x 1000mm long		
pmt F456015	450mm-600mm dia x 1500mm long		
pmt F456020	450mm-600mm dia x 2000mm long		
pmt F456025	450mm-600mm dia x 2500mm long		
pmt F456030	450mm-600mm dia x 3000mm long		

Special diameters and lengths available prices on request

## BULK PRODUCTS

Part Number	Size Range	Working Time <small>subject to humidity &amp; ambient temperature</small>	Cure Time
<b>RESINS</b>			
MRS30W	Winter Resin 30 Litre (20L part A, 10L part B)	15mins	1.5hrs
MRS30S	Summer Resin 30 Litre (20L part A, 10L part B)	25mins	3.5hrs
<b>MATTING</b>			
MM1080	1080gm/sq 57kg approx.		
MM1400	1400gm/sqm 71kg approx		
MM1560	1560gm/sqm 80kg approx		
MA001	100g Retaining wire 25 pieces		
MA002	Polythene Ground Sheet Roll 50m x 4m wide		
MA007	Stretch Film (6 Rolls per Box) 300m x 450mm		
MA003	Metal Spreader 300mm Wide		
MA004	Tap for Dispensing from 20L Resin Container		
MA005	Tap for Dispensing from 10L Resin Container		
<b>PACKER PROTECTION SLEEVING</b>			
MOS006	Upto 100mm	250m	
MOS007	100mm - 150mm	250m	
MOS008	150mm - 225mm	250m	
MOS009	225mm - 300mm	250m	
MOS010	<b>RELEASE AGENT - 2.5 Litre Tub Release Agent</b>		
MA008	<b>TIE WRAPS - 160mm Long x 2,5mm box of 1000</b>		
MA011	<b>LATEX GLOVES - Special anti allergic Latex Gloves box of 100 pieces</b>		
MA012	<b>DISPOSABLE COVERALLS - Disposable Coveralls (Box of 10) Sizes L or XL</b>		

## SUNDARIES

pmt ADPT001	Adaptor for Lockfast Drain Rods
pmt ROD020	3/4" Dia Lockfast Drain Rod
pmt ROD023	7/8" Dia Lockfast Drain Rod
pmt ROD025	1" Dia Lockfast Drain Rod
pmt PRF001	PUSH ROD 1.5 Metres Long Flexible
pmt PRF002	PUSH ROD 1.5 Metres Long Semi Ridged
pmt H10125	Short 125mm Flexible Hose (Packer to First Push Rod)
pmt HM1500	1.5 Metre Hose (Regulator to Push Rod) Blue
pmt HM1000	10 Metre Hose Series 26 Couplings Blue
pmt HM3000	30 Metre Hose Series 26 Couplings Blue
pmt AIR001	Oil Free Compressor 240V with 25L
pmt AIR002	Regulator complete with pressure gauge and shut off valve
pmt AIR003	Compressor Controller 2.5 bar
pmt AIR004	Compressor Controller 1.5 bar

## LATERAL PACKERS

pmt 71006	70mm-100mm dia x 600mm long	pmt 152520	150mm-250mm dia x 2000mm long
pmt 71010	70mm-100mm dia x 1000mm long	pmt 152525	150mm-250mm dia x 2500mm long
pmt 71015	70mm-100mm dia x 1500mm long	pmt 152530	150mm-250mm dia x 3000mm long
pmt 71020	70mm-100mm dia x 2000mm long	pmt 152540	150mm-250mm dia x 4000mm long
pmt 71025	70mm-100mm dia x 2500mm long	pmt 152550	150mm-250mm dia x 5000mm long
pmt 71030	70mm-100mm dia x 3000mm long	pmt 203010	200mm-300mm dia x 1000mm long
pmt 71040	70mm-100mm dia x 4000mm long	pmt 203015	200mm-300mm dia x 1500mm long
pmt 71050	70mm-100mm dia x 5000mm long	pmt 203020	200mm-300mm dia x 2000mm long
pmt 81206	80mm-125mm dia x 600mm long	pmt 203030	200mm-300mm dia x 3000mm long
pmt 81210	80mm-125mm dia x 1000mm long	pmt 203040	200mm-300mm dia x 4000mm long
pmt 81215	80mm-125mm dia x 1500mm long	pmt 203050	200mm-300mm dia x 5000mm long
pmt 81220	80mm-125mm dia x 2000mm long	pmt 304015	300mm-400mm dia x 1500mm long
pmt 81225	80mm-125mm dia x 2500mm long	pmt 304020	300mm-400mm dia x 2000mm long
pmt 81230	80mm-125mm dia x 3000mm long	pmt 304030	300mm-400mm dia x 3000mm long
pmt 81240	80mm-125mm dia x 4000mm long	pmt 304040	300mm-400mm dia x 4000mm long
pmt 81250	80mm-125mm dia x 5000mm long	pmt 304050	300mm-400mm dia x 5000mm long
pmt 101506	100mm-150mm dia x 600mm long	pmt 405015	400mm-500mm dia x 1500mm long
pmt 101510	100mm-150mm dia x 1000mm long	pmt 405020	400mm-500mm dia x 2000mm long
pmt 101515	100mm-150mm dia x 1500mm long	pmt 405030	400mm-500mm dia x 3000mm long
pmt 101520	100mm-150mm dia x 2000mm long	pmt 405040	400mm-500mm dia x 4000mm long
pmt 101525	100mm-150mm dia x 2500mm long	pmt 405050	400mm-500mm dia x 5000mm long
pmt 101530	100mm-150mm dia x 3000mm long		
pmt 101540	100mm-150mm dia x 4000mm long	pmt 506020	500mm-600mm dia x 2000mm long
pmt 101550	100mm-150mm dia x 5000mm long	pmt 506030	500mm-600mm dia x 3000mm long
pmt 152506	150mm-250mm dia x 600mm long	pmt 506040	500mm-600mm dia x 4000mm long
pmt 152510	150mm-250mm dia x 1000mm long	pmt 506050	500mm-600mm dia x 5000mm long
pmt 152515	150mm-250mm dia x 1500mm long		

Before carrying out any repair ensure that the pipe is clear of any debris, roots etc. and the walls are cleaned if necessary using a high-pressure jetter.

Measure accurately the distance from the manhole to the area to be repaired and transfer this dimension to the packer and pushrod assembly.

Ensure that the packer is protected from the resin at all times.

Ensure that the packer is the correct size for the pipe.

Ensure that the packer is not over inflated.

Wear both pairs of gloves when applying the resin and discard the top pair when finished handling the resin mat.



**1** Slide the packer into one of the protective sleeves and secure at both ends with the cable ties then cut off any excess length of sleeve. The tie at the end furthest from the air supply should be pulled tight but the end nearest the air supply should be slack to allow air to escape when the packer is inflated against the inside of the pipe. Place this assembly into the second protective sleeve and secure with one cable tie only at the end furthest away from the air supply.



**2** Lay out the protective plastic sheet and place the fibreglass mat on the sheet with the shiny smooth side uppermost.



**3** Pour the small bottle of hardener into the larger bottle containing the resin, seal and shake vigorously until the mixture is a uniform caramel colour.



**4** Pour one half of the resin onto the fibreglass mat. Using the spreader provided, spread the resin evenly over the surface of the fibreglass mat making sure that the whole area is covered.



**5** Make the first fold bringing the edge to 25mm passed the centre line of the mat. Apply a quarter of the remaining resin to the folded over area and spread evenly over the area.



**6** Make the second fold bringing the edge over the first folded area to give a 50mm overlap. Apply a third of the remaining resin to the folded over area and spread evenly over the area. Turn the mat over and spread the remaining resin evenly over this area.



**7** Place the packer onto resin coated mat and roll the mat around the packer allowing it to overlap.



**8** Using the metal ties secure the mat onto the packer. These ties should be positioned 25mm from the each end of the mat. Secure the ties by turning the ends 2 or 3 half turns and cut off any excess wire. Slightly inflate the packer to help retain the mat on the packer.



**9** Connect the short inflation hose and the required number of push rods onto the packer. Ensure the locking rings on the push rods are tightened.



**10** Insert the packer into the pipe and slide it into position at the centre of the repair. Inflate the packer to the required pressure and allow the resin to cure. Approximately 2 hours, but times may vary according to temperature. Deflate the packer and remove from the pipe to provide a permanent repair. Take care on inflation of the packer in old or badly damaged pipes as full pressure may cause further damage.

**For more information please contact us**

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